1A *db/db*

1B db^{Pas}/db^{Pas}

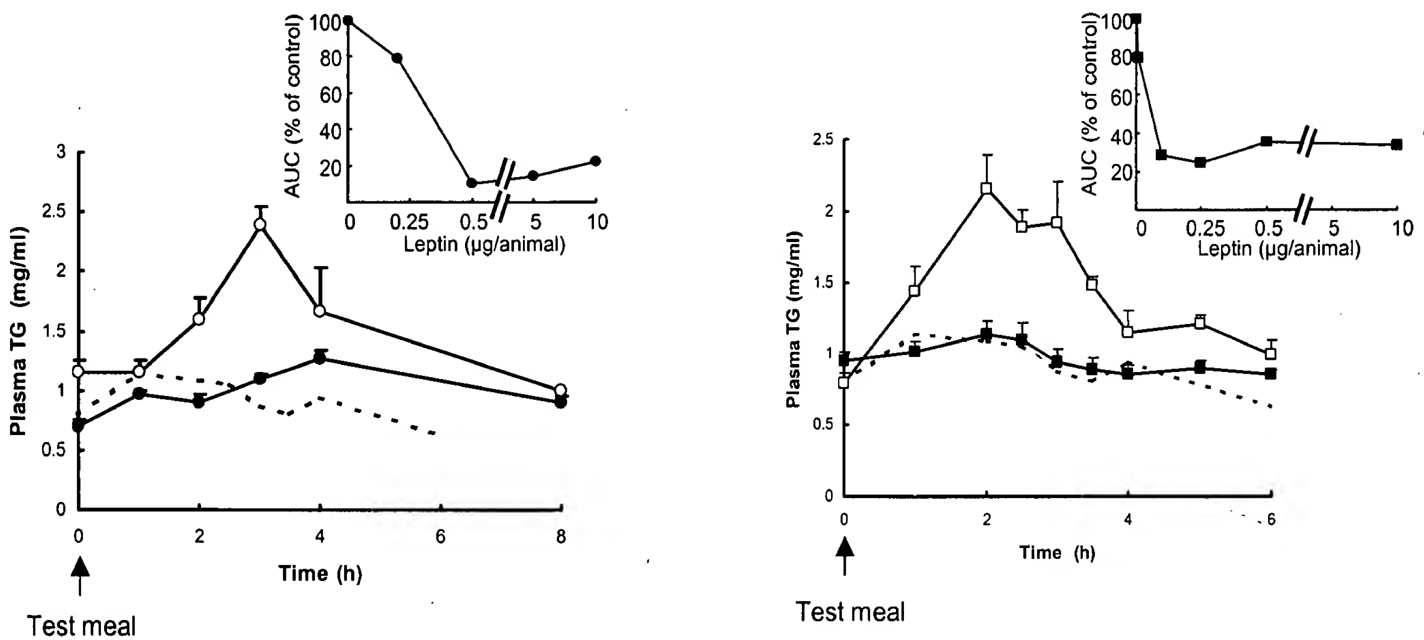


Figure 1

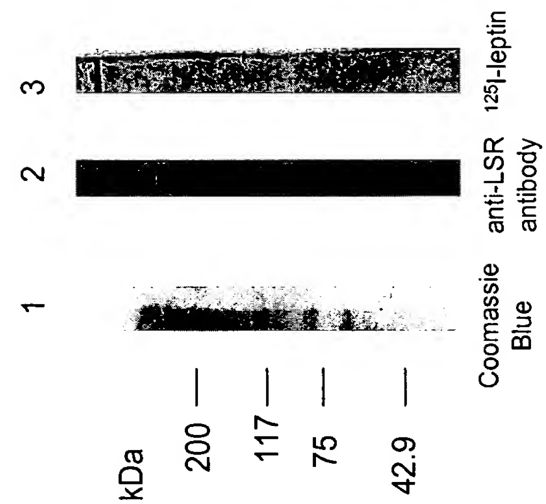
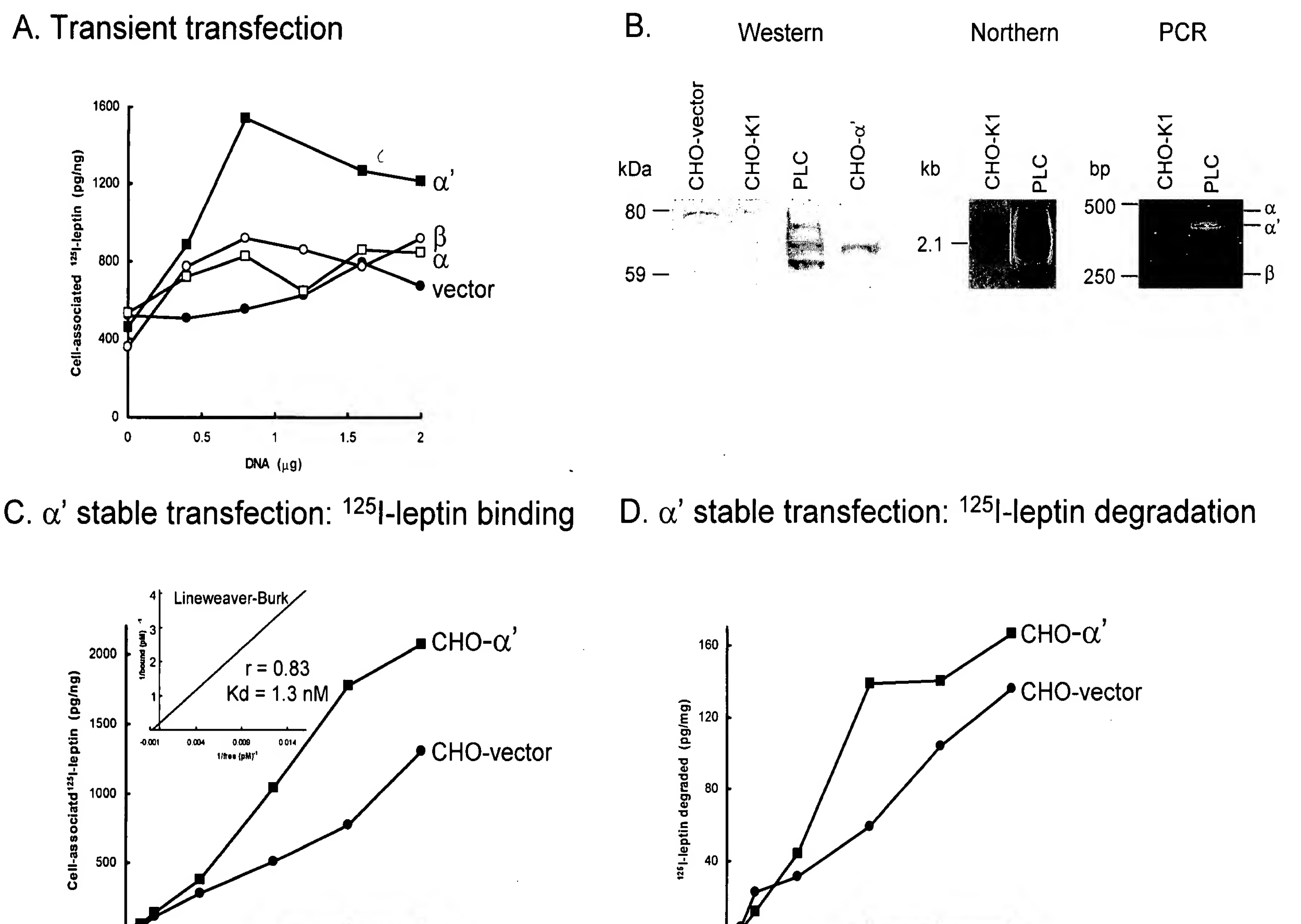

1
2
3
kDa
200
117
75
42.9
Coomassie Blue
anti-LSR antibody
125I-leptin

Figure 2



A. Transient transfection
Cell-associated 125I-leptin (pg/ng)
1600
1200
800
400
0
0
0.5
1
1.5
2
DNA (μg)
α'
β
α
vector
B.
Western
Northern
PCR
kDa
CHO-vector
CHO-K1
PLC
CHO-α'
80
59
kb
CHO-K1
PLC
2.1
bp
CHO-K1
PLC
500
250
α
α'
β
C. α' stable transfection: 125I-leptin binding
Cell-associatd 125I-leptin (pg/ng)
2000
1500
1000
500
0
0
5
10
15
20
125I-leptin (ng/ml)
Lineweaver-Burk
r = 0.83
Kd = 1.3 nM
CHO-α'
CHO-vector
D. α' stable transfection: 125I-leptin degradation
125I-leptin degraded (pg/mg)
160
120
80
40
0
0
5
10
15
20
125I-leptin (ng/ml)
CHO-α'
CHO-vector

Figure 3

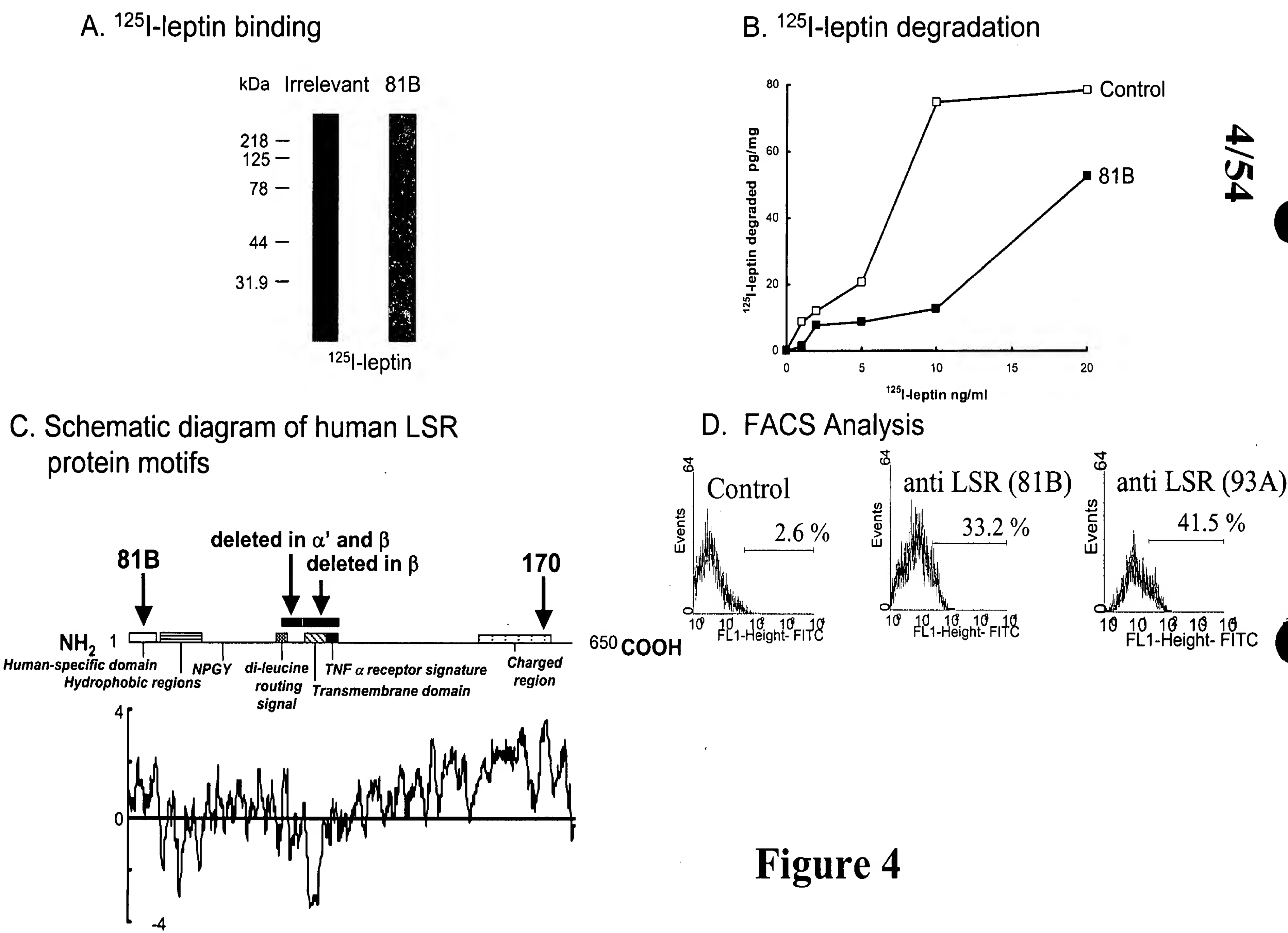

A. 125I-leptin binding
kDa Irrelevant 81B
218
125
78
44
31.9
125I-leptin
B. 125I-leptin degradation
125I-leptin degraded pg/mg
125I-leptin ng/ml
Control
81B
C. Schematic diagram of human LSR protein motifs
81B
deleted in α' and β
deleted in β
170
NH2 1
650 COOH
Human-specific domain
Hydrophobic regions
NPGY
di-leucine routing signal
TNF α receptor signature
Transmembrane domain
Charged region
D. FACS Analysis
Control
2.6 %
anti LSR (81B)
33.2 %
anti LSR (93A)
41.5 %
Events
FL1-Height- FITC

Figure 4

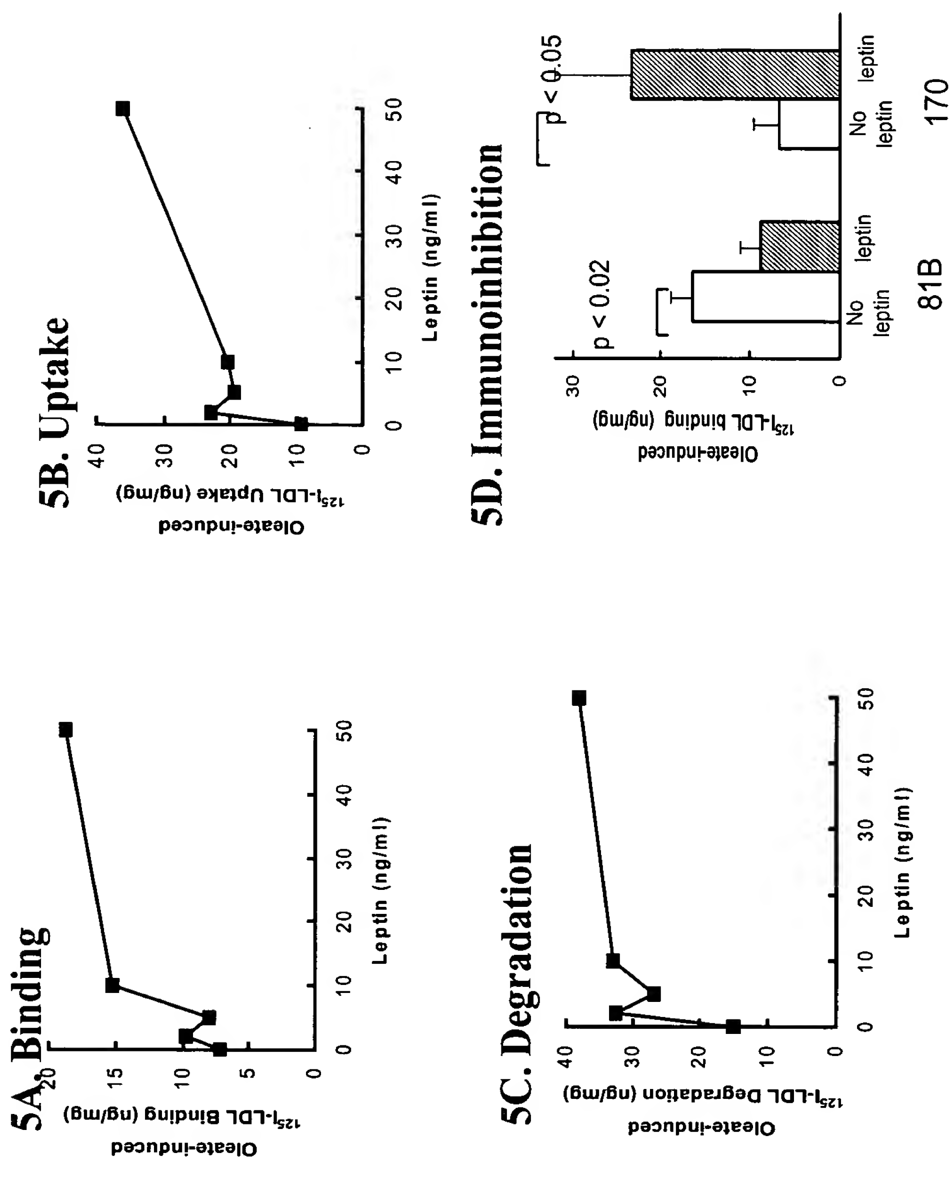

5A. Binding
Oleate-induced
125I-LDL Binding (ng/mg)
Leptin (ng/ml)
5B. Uptake
Oleate-induced
125I-LDL Uptake (ng/mg)
Leptin (ng/ml)
5C. Degradation
Oleate-induced
125I-LDL Degradation (ng/mg)
Leptin (ng/ml)
5D. Immunoinhibition
Oleate-induced
125I-LDL binding (ng/mg)
p < 0.02
p < 0.05
No leptin
leptin
81B
170

Figure 5

6.A
LDL

6.B
Chylomicrons

6.C
Antibody

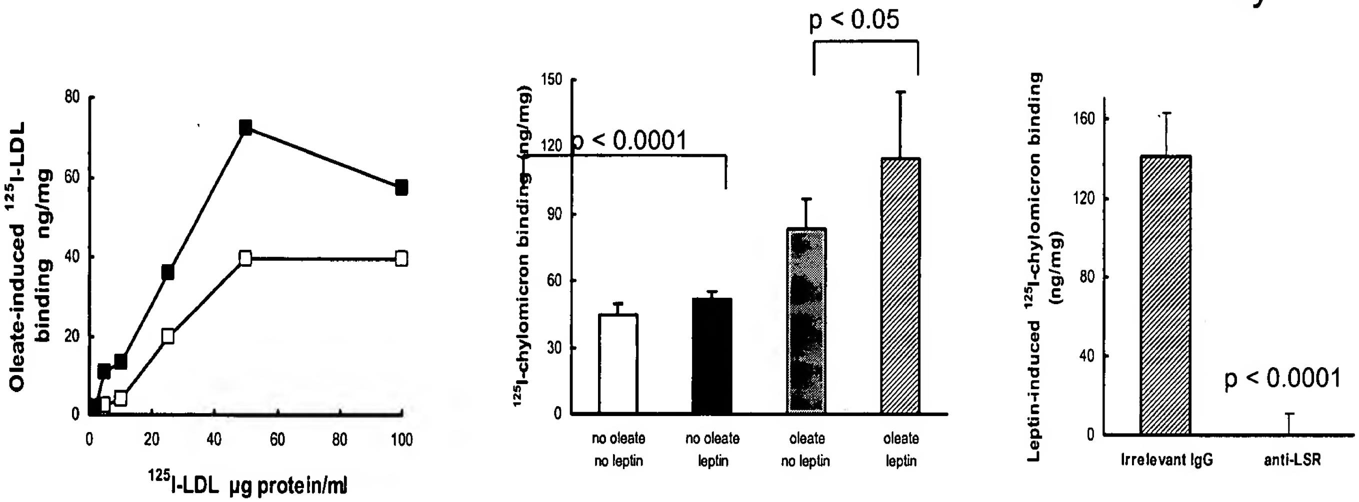


Figure 6

7A. Rat hepatocytes **7B. db^{Pas}/db^{Pas} postprandial plasma TG**

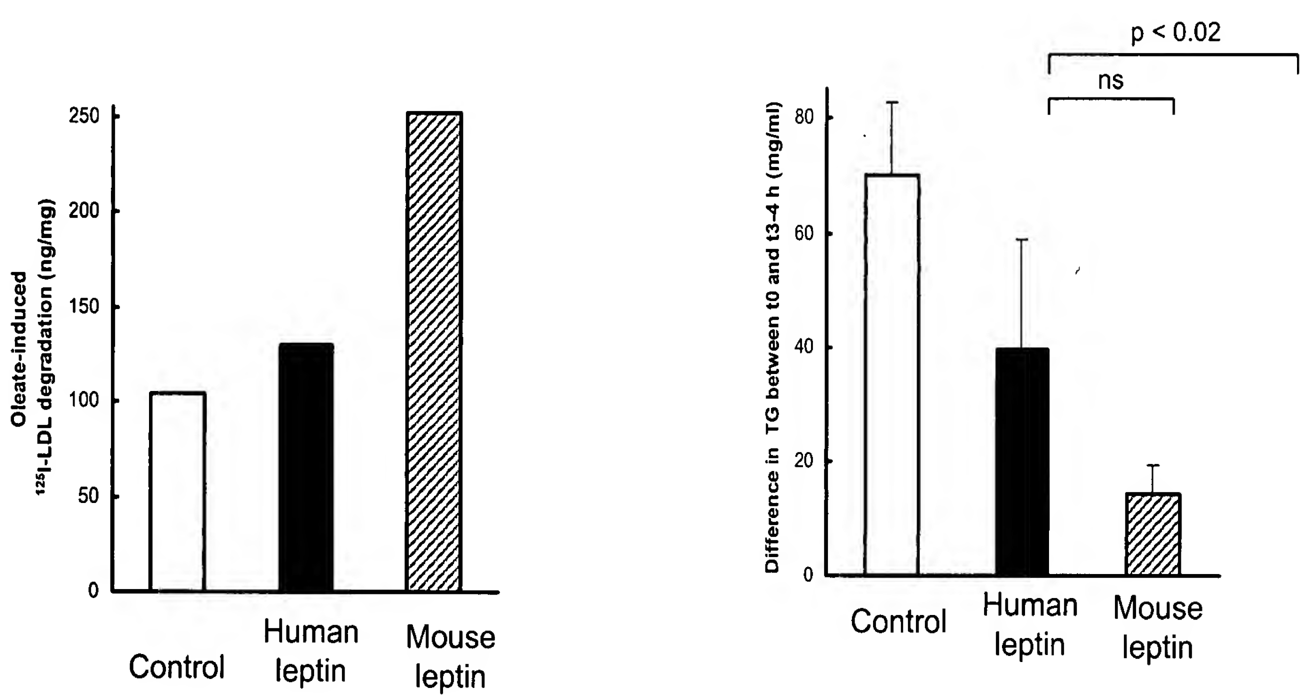


Figure 7

8.A Rat hepatocytes

8.B Human PLC

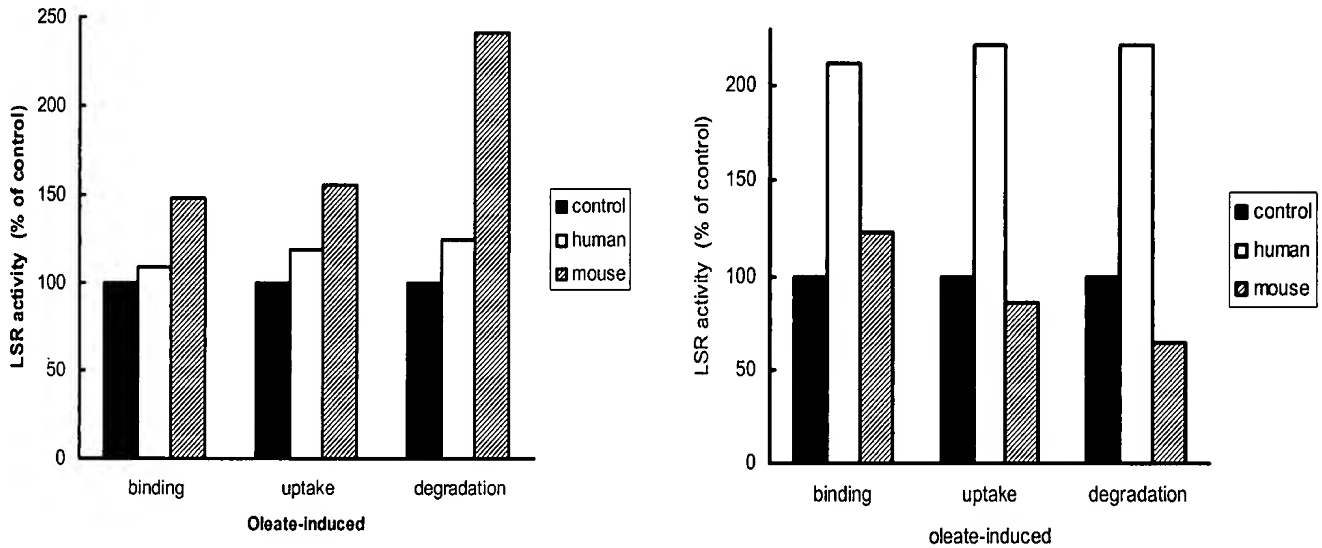


Figure 8

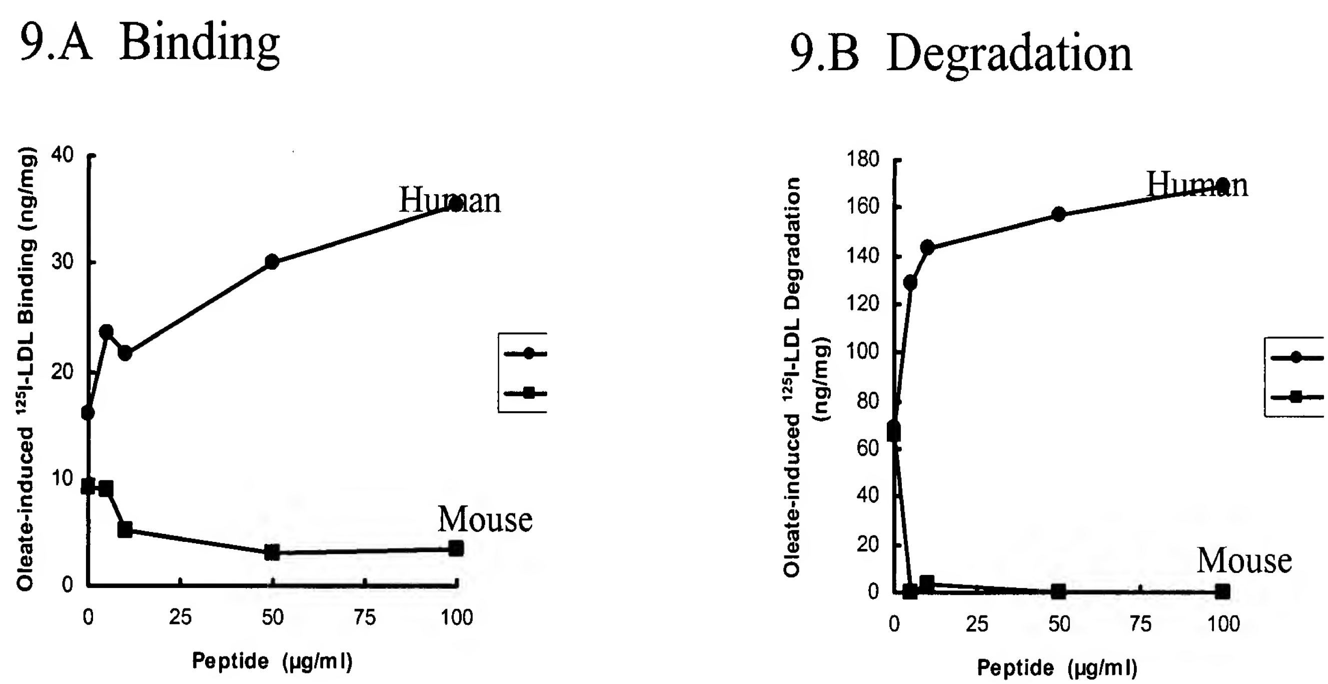
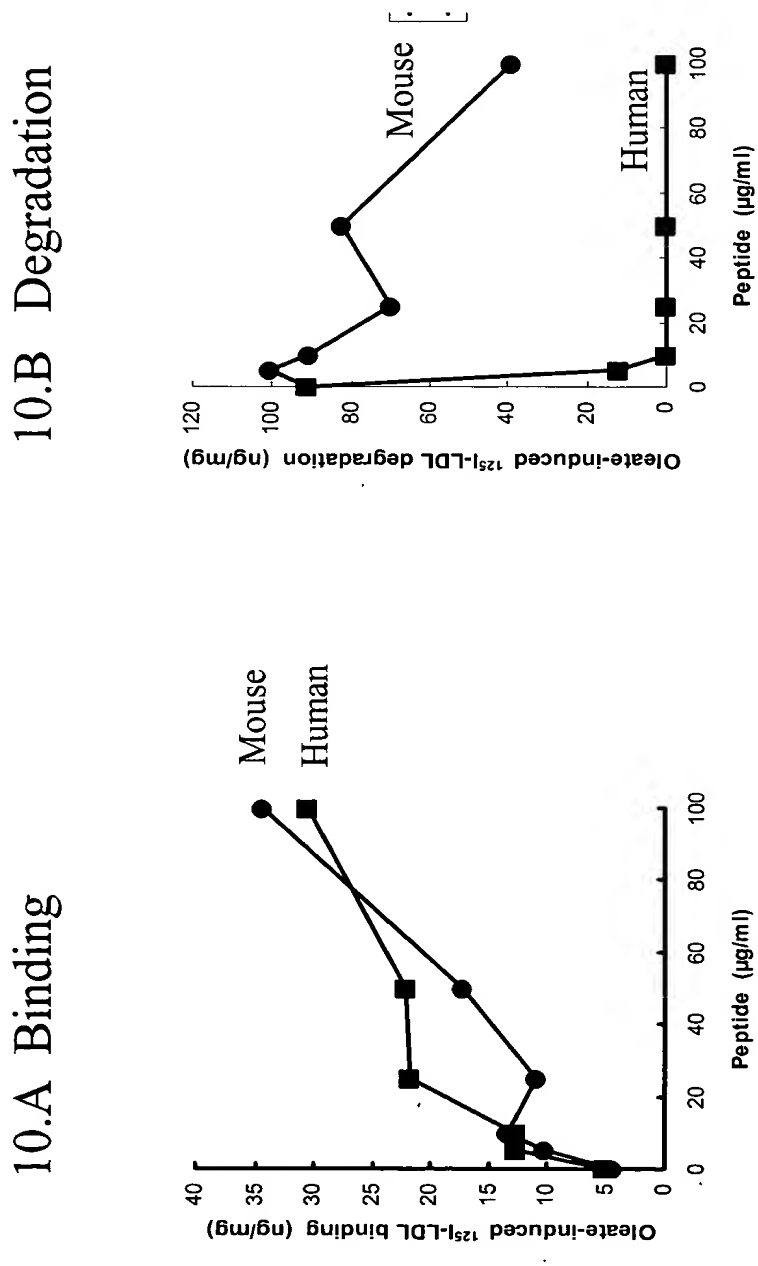

9.A Binding
Oleate-induced 125I-LDL Binding (ng/mg)
40
30
20
10
0
0
25
50
75
100
Peptide (µg/ml)
Human
Mouse
9.B Degradation
Oleate-induced 125I-LDL Degradation (ng/mg)
180
160
140
120
100
80
60
40
20
0
0
25
50
75
100
Peptide (µg/ml)
Human
Mouse

Figure 9



10.A Binding
Oleate-induced 125I-LDL binding (ng/mg)
Peptide (µg/ml)
Mouse
Human
10.B Degradation
Oleate-induced 125I-LDL degradation (ng/mg)
Peptide (µg/ml)
Mouse
Human

Figure 10

Effect of mouse leptin (A) or leptin peptide (B) on postprandial plasma TG response in ob/ob mice.

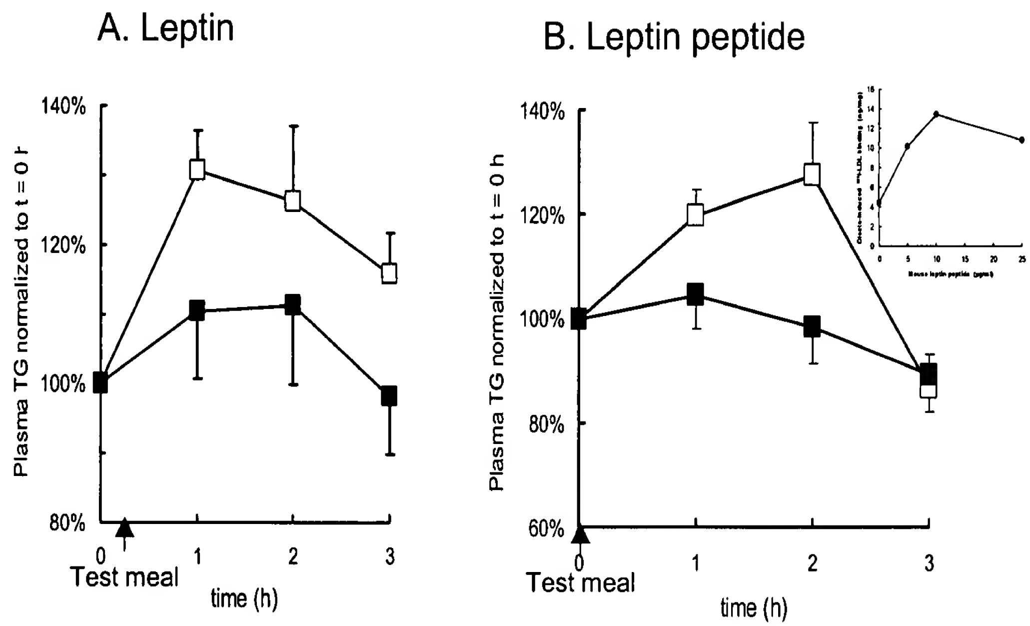


Figure 11

Effect of test meal with and without leptin injection on postheparin lipolytic activity in db^{Pas}/db^{Pas} mice

	Postheparin lipolytic activities in db^{Pas}/db^{Pas} (µmol FFA/ml/h)
No high-fat test meal	11.7 ± 2.4
High-fat test meal	19.5 ± 9.2 ns
High-fat test meal + 50 µg leptin	12.2 ± 2.7 ns

ns = not significant).

Figure 12

1	MHWGTLCGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTGLDFIPGLHPIL	Homo sapiens
1	MCWRPLCRFLWLWSYLSYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSAKQRVTGLDFIPGLHPIL	Mus musculus
1	MCWRPLCRFLWLWSYLSYVQAVPIHKVQDDTKTLIKTIVTRINDISHTQSVSARQRVTGLDFIPGLHPIL	Rattus norvegicus
1	MRCGPLCRFLWLWPYLSYVEAVPIWRVQDDTKTLIKTIVTRISDISHMQSVSSKQRVTGLDFIPGLHPVL	Sus scrofa
1	MRCGPLYRFLWLWPYLSYVEAVPIRKVQDDTKTLIKTIVTRINDISHTQSVSSKQRVTGLDFIPGLHPLL	Bos taurus
1	MCWRPLCR---LWSYLVYVQAVPCQIFQDDTKTLIKTIVTRINDISHT-SVSAKQRVTGLDFIPGLHPIL	Gallus gallus
1	---------------------VPIRKVQDDTKTLIKTIVTRINDISHTQSVSSKQRVTGLDFIPGLHPLL	Ovus aries
1	---------------------VPIRKVQDDTKTLIKTIVARINDISHTQSVSSKQRVAGLDFIPGLQPVL	Canis familiaris
1	---------------------VPIQKVQDDTKTLIKTIVTRISDISHTQSVSSKQKVTGLDFIPGLHPIL	Gorilla gorilla gorilla
1	MYWRTLWGFLWLWPYLFYIQAVPIQKVQSDTKTLIKTIVTRINDISHTQSVSSKQRVTGLDFIPGLHPVL	Macaca mulatta
1	---------------------VPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTGLDFIPGLHPIL	Pan troglodytes
1	---------------------VPIQKVQDDTKTLIKTVITRINDISHTQSVSSKQKVTGLDFIPGLHPIL	Pongo pygmaeus

71	TLSKMDQTLAVYQQILTSMPSRNVIQISNDLENLRDLLHVLAFSKSCHLPWASGLETLDSLGGVLEASGY	Homo sapiens
71	SLSKMDQTLAVYQQVLTSLPSQNVLQIANDLENLRDLLHLLAFSKSCSLPQTSGLQKPESLDGVLEASLY	Mus musculus
71	SLSKMDQTLAVYQQILTSLPSQNVLQIAHDLENLRDLLHLLAFSKSCSLPQTRGLQKPESLDGVLEASLY	Rattus norvegicus
71	SLSKMDQTLAIYQQILTSLPSRNVIQISNDLENLRDLLHLLASSKSCPLPQARALETLESLGGVLEASLY	Sus scrofa
71	SLSKMDQTLAIYQQILTSLPSRNVVQISNDLENLRDLLHLLAASKSCPLPQVRALESLESLGVVLEASLY	Bos taurus
67	SLSKMDQTLAVYQQVLTSLPSQNVLQIANDLENLRDLLHLLAFSKSCSLPQTSGLQKPESLDGVLEASLY	Gallus gallus
50	SLSKMDQTLAIYQQILASLPSRNVIQISNDLENLRDLLHLLAASKSCPLPQVRALESLESLGVVLEASLY	Ovus aries
50	SLSRMDQTLAIYQQILNSLHSRNVVQISNDLENLRDLLHLLASSKSCPLPRARGLETFESLGGVLEASLY	Canis familiaris
50	TLSKMDQTLAVYQQILTSMPSRNMIQISNDLENLRDLLHVLAFSKSCHLPWASGLETLDSLGGVLEASGY	Gorilla gorilla gorilla
71	TLSQMDQTLAIYQQILINLPSRNVIQISNDLENLRDLLHLLAFSKSCHLPLASGLETLESLGDVLEASLY	Macaca mulatta
50	TLSKMDQTLAVYQQILTSMPSRNMIQISNDLENLRDLLHVLAFSKSCHLPWASGLETLDSLGGVLEASGY	Pan troglodytes
50	TLSKMDQTLAVYQQILTSMPSRNVIQISNDLENLRDLLHVLAFSKSCHLPWASGLETLDRLGGVLEASGY	Pongo pygmaeus

141	STEVVALSRLQGSLQDMLWQLDLSPGC	Homo sapiens
141	STEVVALSRLQGSLQDILQQLDVSPEC	Mus musculus
141	STEVVALSRLQGSLQDILQQLDLSPEC	Rattus norvegicus
141	STEVVALSRLQGALQDMLRQLDLSPGC	Sus scrofa
141	STEVVALSRLQGSLQDMLRQLDLSPGC	Bos taurus
137	STEVVALSRLQGSLQDILQQLDISPEC	Gallus gallus
120	STEVVALSRLQGSLQDMLRQLDLSPGC	Ovus aries
120	STEVVALSRLQAALQDMLRRLDLSPGC	Canis familiaris
120	STEVVALSRLQGSLQDMLWQLDLSPGC	Gorilla gorilla gorilla
141	STEVVALSRLQGSLQDMLWQLDLSPGC	Macaca mulatta
120	STEVVALSRLQGSLQDMLWQLDLSPGC	Pan troglodytes
120	STEVVALSRLQRSLQDMLWQLDLSPGC	Pongo pygmaeus

Figure 13

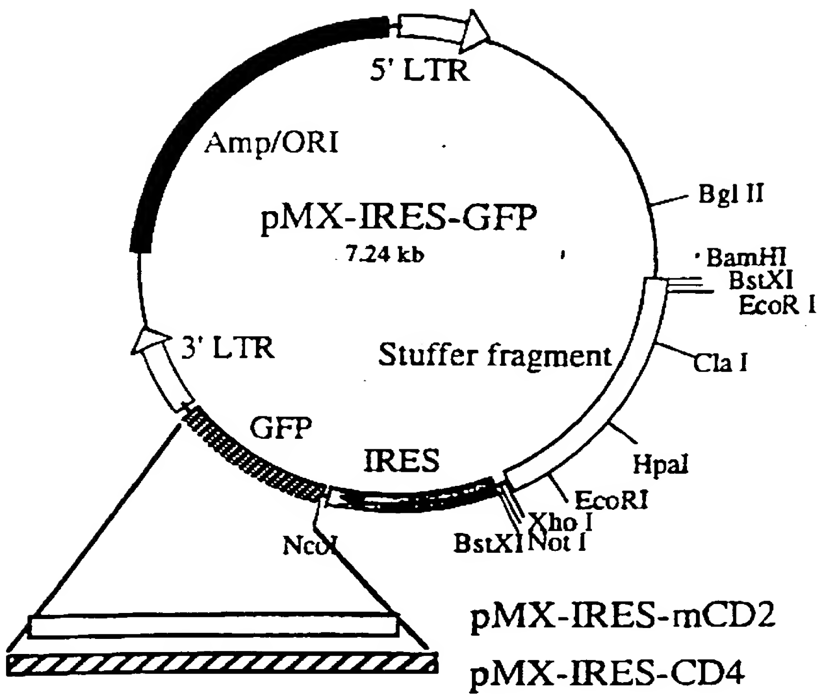
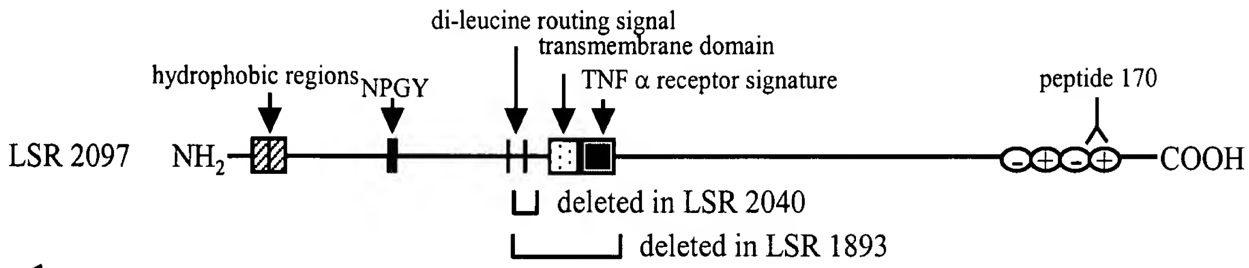

5' LTR
Amp/ORI
pMX-IRES-GFP
7.24 kb
Bgl II
BamHI
BstXI
EcoR I
3' LTR
Stuffer fragment
Cla I
GFP
IRES
HpaI
EcoRI
Xho I
BstXI
Not I
NcoI
pMX-IRES-mCD2
pMX-IRES-CD4

Figure 14

Plan for creation of truncated forms of LSR



1 EcoRI Sal I
Truncates at AA 145 just prior to the NPGY (nt 437 of the cDNA)

2 EcoRI SacI
Truncates at AA 234 just prior to exon 4 (nt 703 of the cDNA)

3 Sac I Xba I
Use alpha so Sac I cuts in exon 4, this effectively deletes the di-leucine signal.
Start at nt 744 which will start at AA 249 and proceed through the C-term.

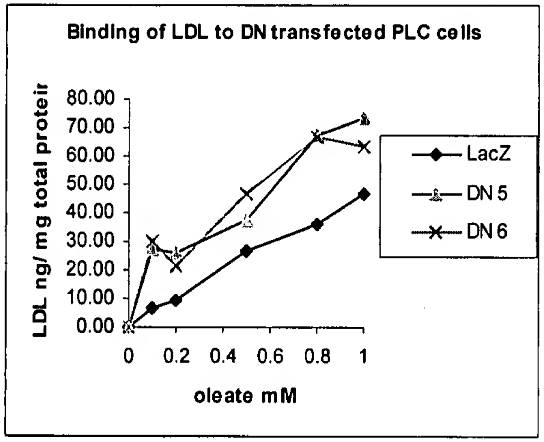
4a-c EcoRI Kpn I
Truncates at AA 350 (nt 1052) near the end of exon 6
a is from LSR α, **b** is from LSR α' and **c** is from LSR β.

5 Kpn I Xba I
Contains C-term. end only exon 7- end
AA 353 (nt 1057) -AA 650 (nt 1950 of coding)

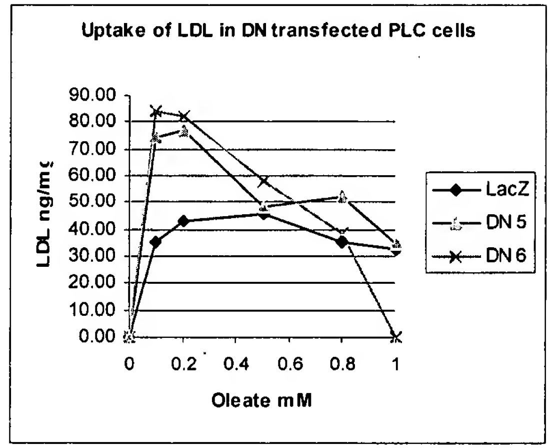
6 Kpn I Xho I
AA 353 (nt 1057) in exon7 -AA541 (nt 1625) -RSRS domain in exon 9

Figure 15

16A



16B



16C

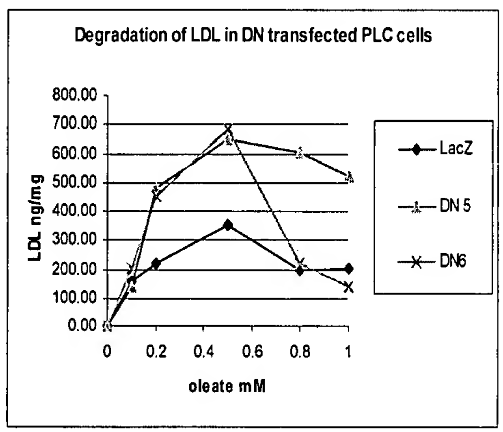
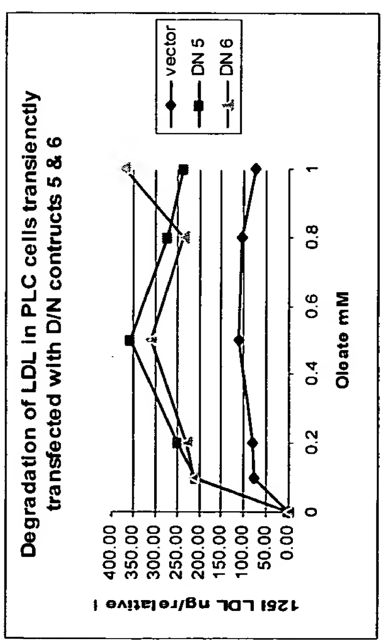
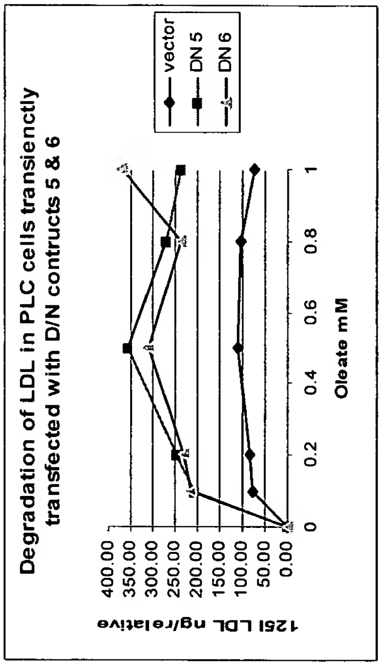


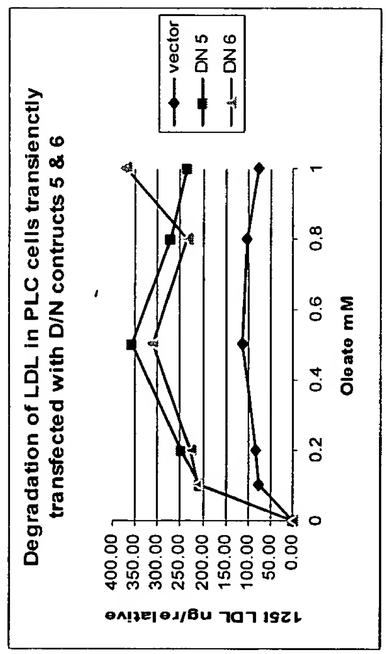
Figure 16



17A



17B



17C

Figure 17

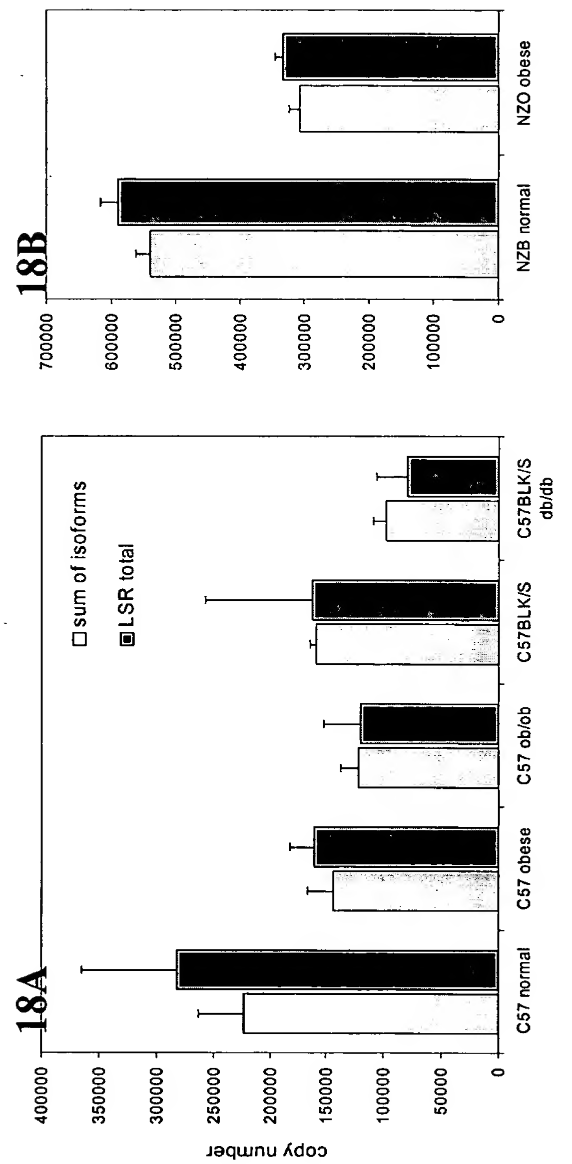
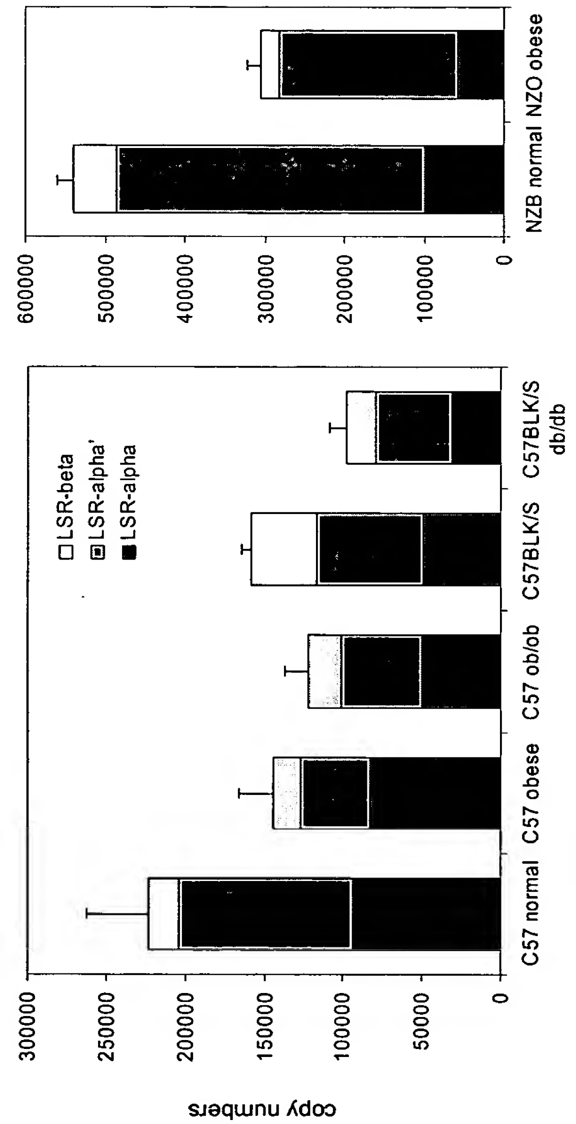

18A
copy number
400000
350000
300000
250000
200000
150000
100000
50000
0
C57 normal
C57 obese
C57 ob/ob
C57BLK/S
C57BLK/S db/db
sum of isoforms
LSR total
18B
700000
600000
500000
400000
300000
200000
100000
0
NZB normal
NZO obese

Figure 18



copy numbers
300000
250000
200000
150000
100000
50000
0
LSR-beta
LSR-alpha'
LSR-alpha
C57 normal
C57 obese
C57 ob/ob
C57BLK/S
C57BLK/S db/db
600000
500000
400000
300000
200000
100000
0
NZB normal
NZO obese

Figure 19

20A. 20 B.

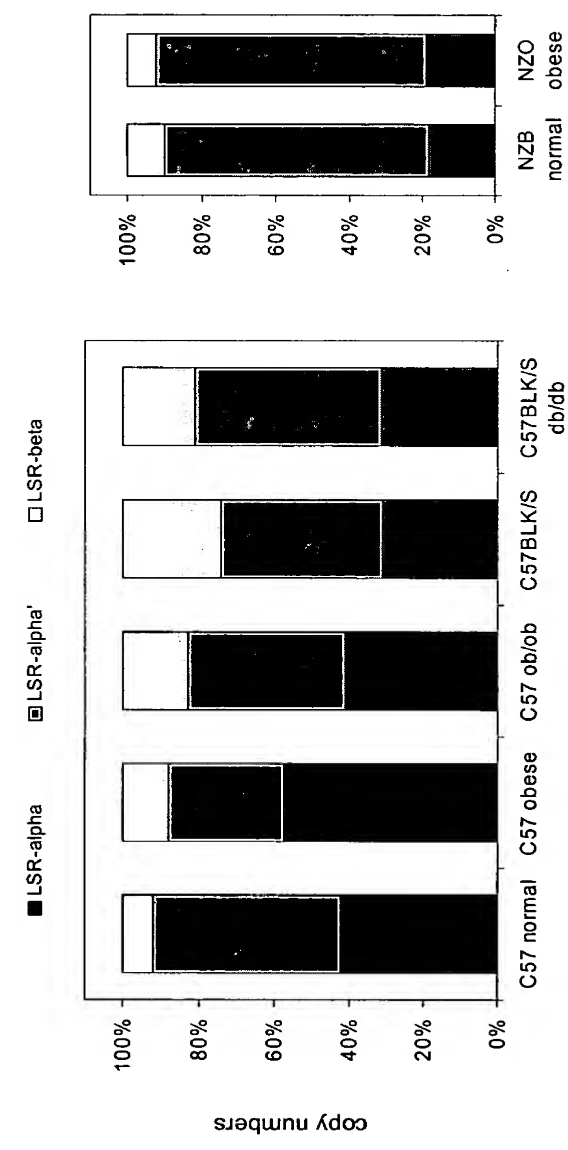


Figure 20

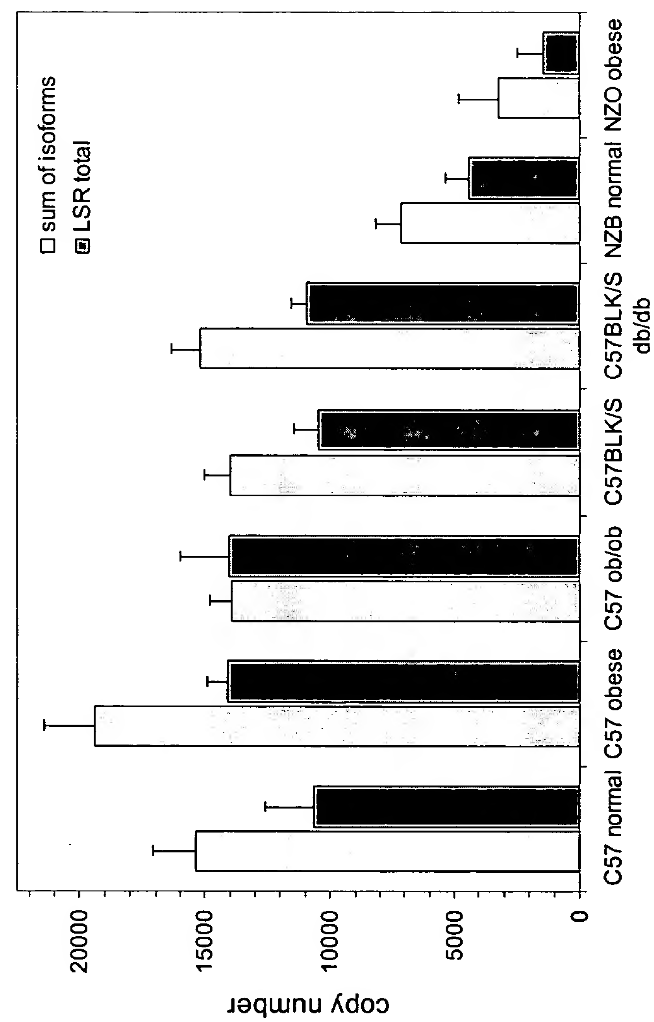

sum of isoforms
LSR total
copy number
20000
15000
10000
5000
0
C57 normal
C57 obese
C57 ob/ob
C57BLK/S
C57BLK/S db/db
NZB normal
NZO obese

Figure 21

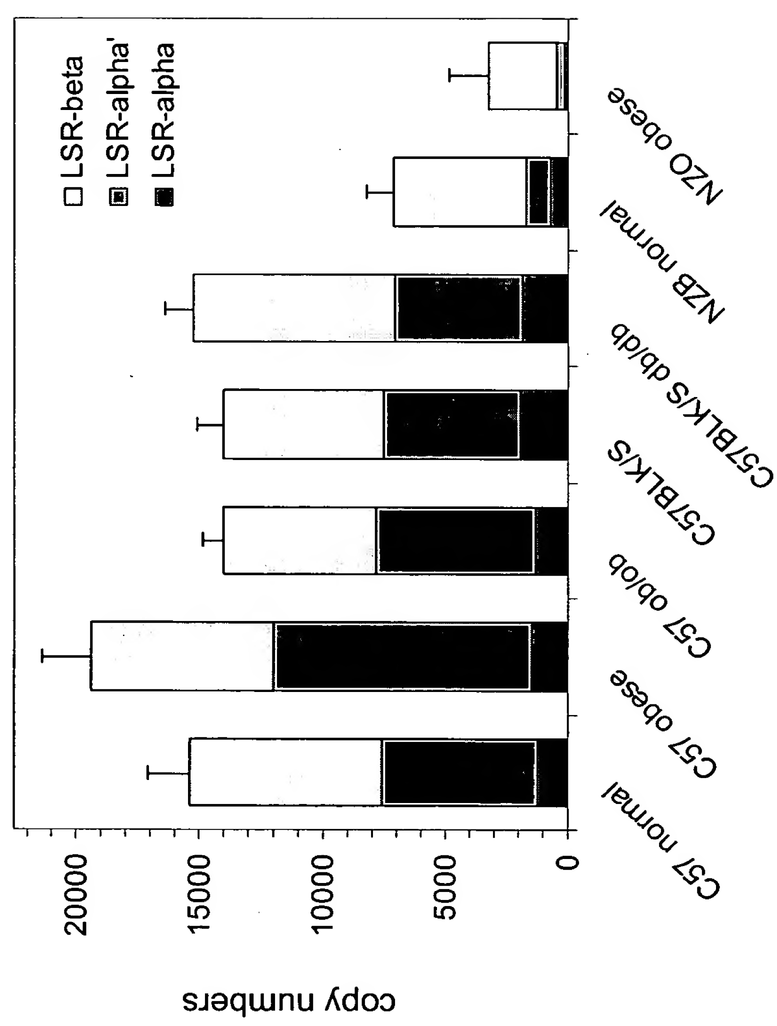

LSR-beta
LSR-alpha'
LSR-alpha
copy numbers
0
5000
10000
15000
20000
C57 normal
C57 obese
C57 ob/ob
C57BLK/S
C57BLK/S db/db
NZB normal
NZO obese

Figure 22

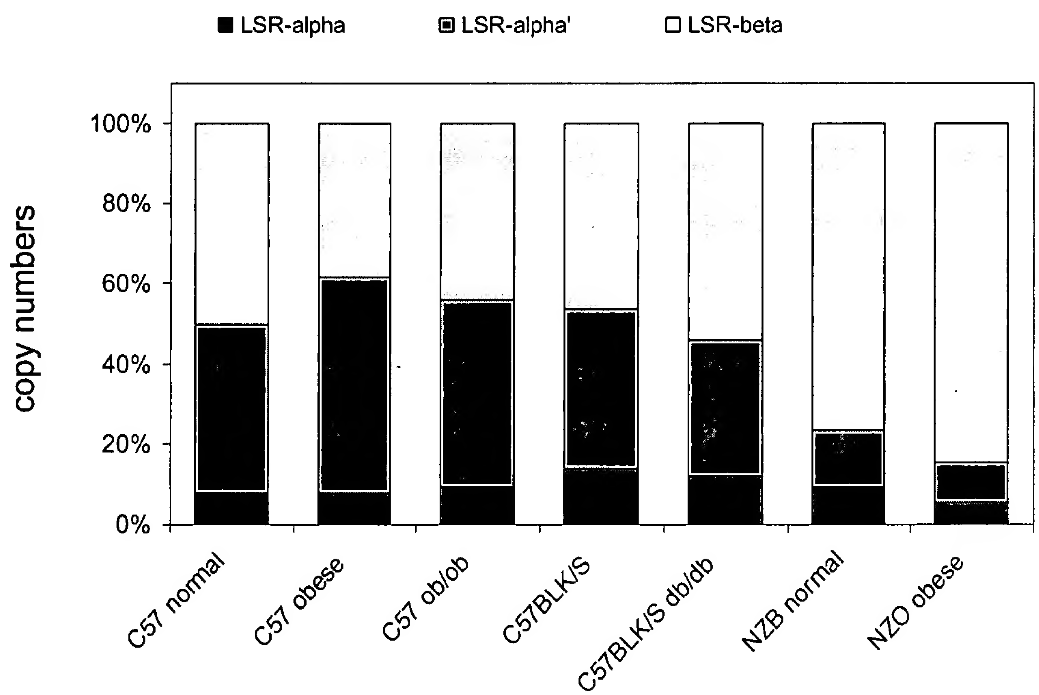
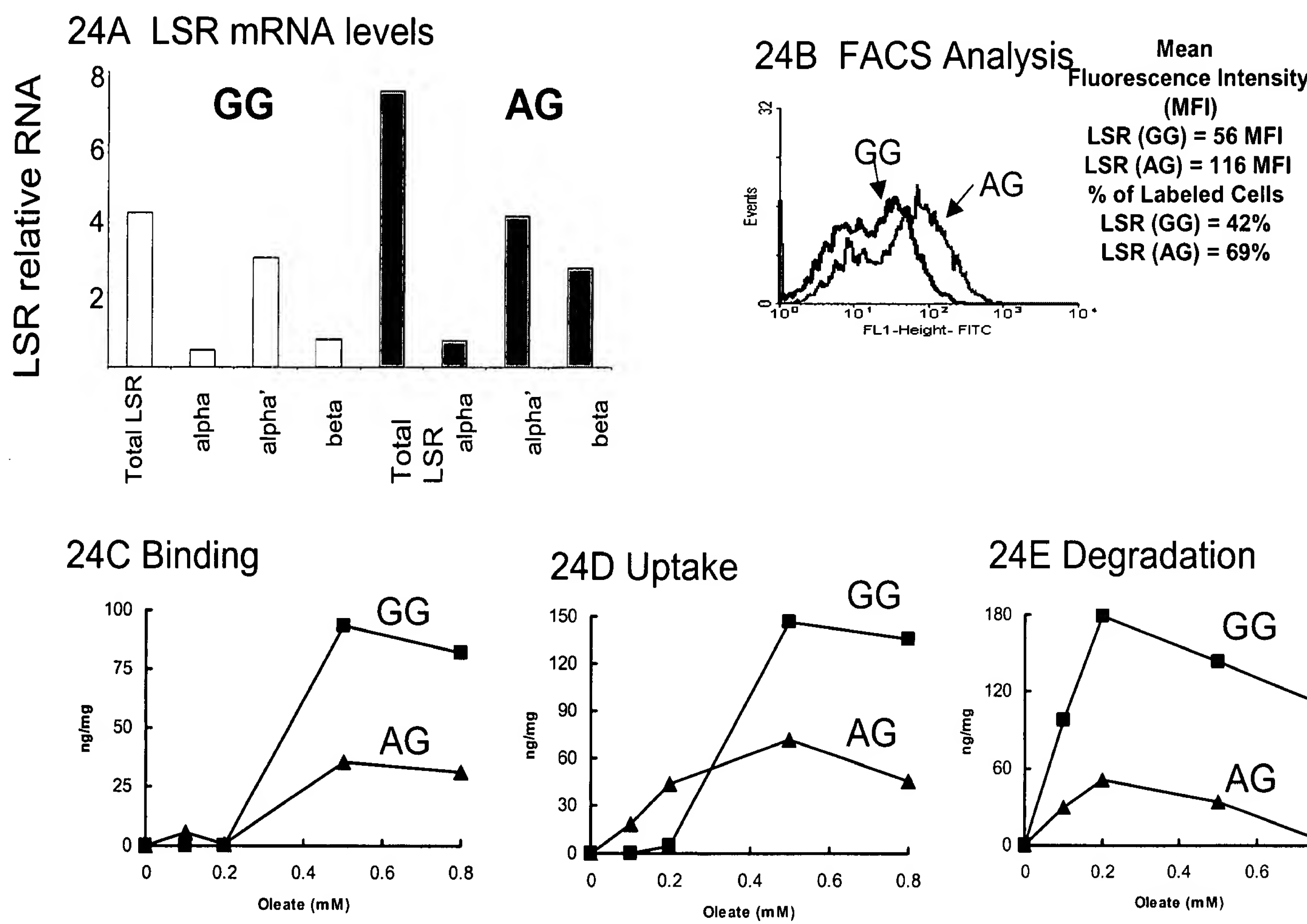

LSR-alpha
LSR-alpha'
LSR-beta
copy numbers
100%
80%
60%
40%
20%
0%
C57 normal
C57 obese
C57 ob/ob
C57BLK/S
C57BLK/S db/db
NZB normal
NZO obese

Figure 23



24A LSR mRNA levels
LSR relative RNA
8
6
4
2
GG
AG
Total LSR
alpha
alpha'
beta
Total LSR
alpha
alpha'
beta
24B FACS Analysis
32
Events
0
GG
AG
10^0
10^1
10^2
10^3
10^4
FL1-Height- FITC
Mean Fluorescence Intensity (MFI)
LSR (GG) = 56 MFI
LSR (AG) = 116 MFI
% of Labeled Cells
LSR (GG) = 42%
LSR (AG) = 69%
24C Binding
100
75
50
25
0
ng/mg
GG
AG
0
0.2
0.4
0.6
0.8
Oleate (mM)
24D Uptake
150
120
90
60
30
0
ng/mg
GG
AG
0
0.2
0.4
0.6
0.8
Oleate (mM)
24E Degradation
180
120
60
0
ng/mg
GG
AG
0
0.2
0.4
0.6
0.8
Oleate (mM)

Figure 24

Table

Characteristics of recombinant ZFPs directed toward LSR sequences.

ID#	ZFP	Fold Activation	Kd (nM)	Target Sequence
5182	2B-1A	21.5	0.10	AAGGTCGCCtatGGTGCAGAC (SEQ ID NO:102)
5183	4A-3A	8.7	0.05	GTGGGAGCCcgGGGGCTGGA (SEQ ID NO:103)
5185	6A-5A	8.4	0.02	TGGGGGTGGGCGGCGGGG (SEQ ID NO:104)
5186	8A-7B	6.5	0.02	CCGGGAGTGcgCAGGGGGTA (SEQ ID NO:105)
5205	1A-7B	29.7	0.30	GTGGCTGCACAAGGTCGCC (SEQ ID NO:106)

Figure 25

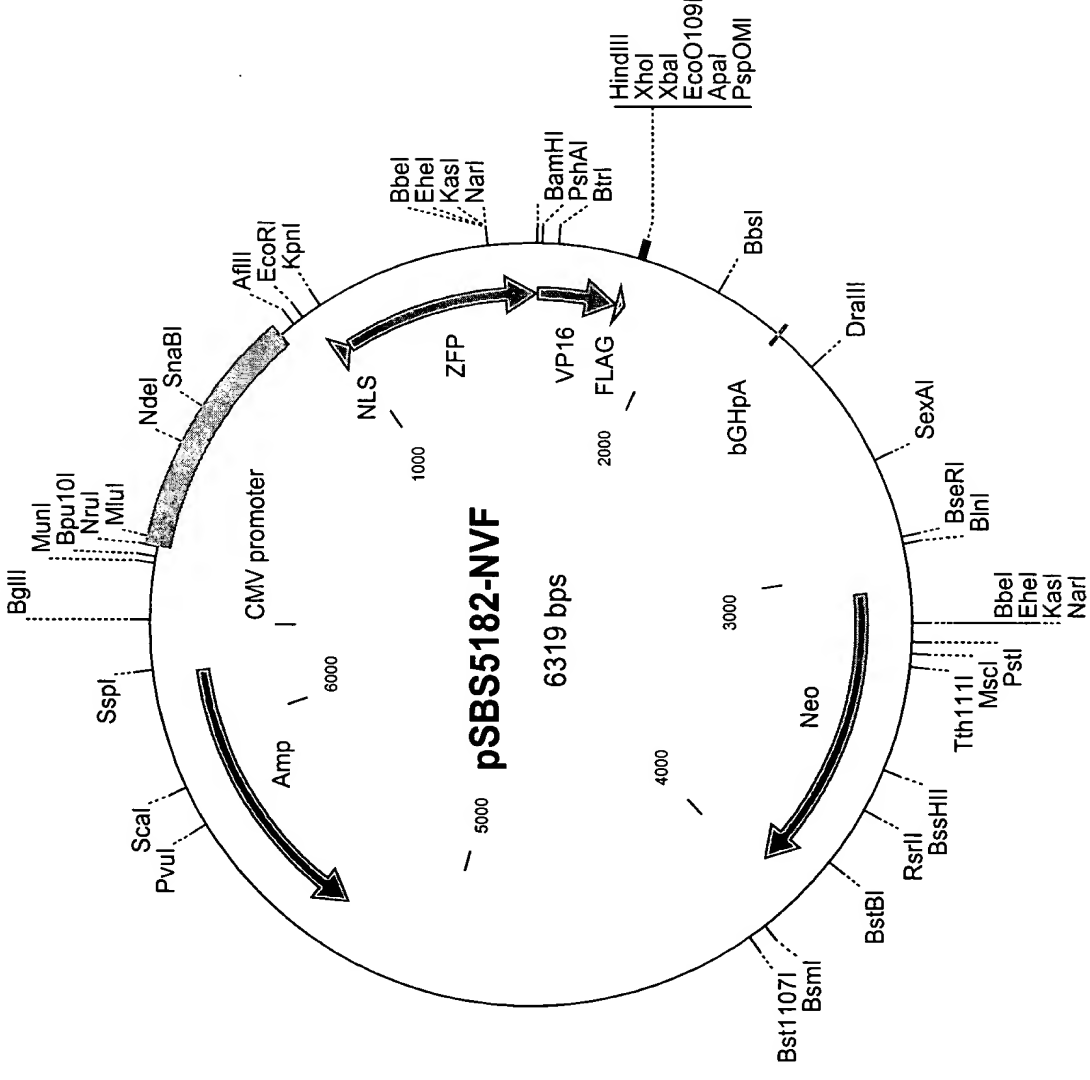

pSBS5182-NVF
6319 bps
CMV promoter
NLS
ZFP
VP16
FLAG
bGHpA
Neo
Amp
1000
2000
3000
4000
5000
6000
HindIII
XhoI
XbaI
EcoO109I
ApaI
PspOMI
BamHI
PshAI
BtrI
BbeI
EheI
KasI
NarI
AflII
EcoRI
KpnI
SnaBI
NdeI
MunI
Bpu10I
NruI
MluI
BglII
SspI
ScaI
PvuI
BbsI
DraIII
SexAI
BseRI
BlnI
BbeI
EheI
KasI
NarI
Tth111I
MscI
PstI
BssHII
RsrII
BstBI
Bst1107I
BsmI

Figure 26A

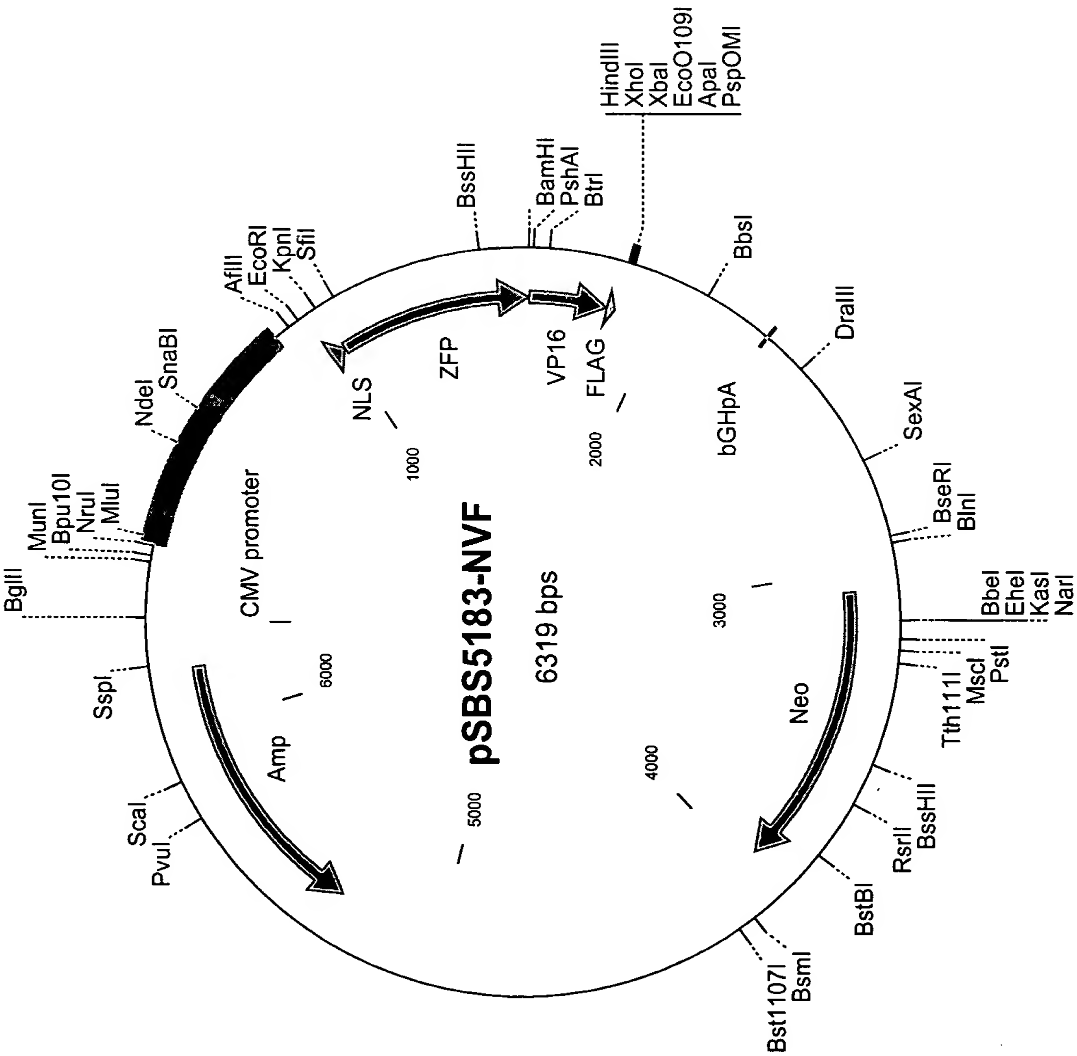

pSBS5183-NVF
6319 bps
CMV promoter
NLS
ZFP
VP16
FLAG
bGHpA
Neo
Amp
1000
2000
3000
4000
5000
6000
BglII
MunI
Bpu10I
NruI
MluI
NdeI
SnaBI
AflII
EcoRI
KpnI
SfiI
BssHII
BamHI
PshAI
BtrI
HindIII
XhoI
XbaI
EcoO109I
ApaI
PspOMI
BbsI
DraIII
SexAI
BseRI
BlnI
BbeI
EheI
KasI
NarI
Tth111I
MscI
PstI
RsrII
BssHII
BstBI
Bst1107I
BsmI
PvuI
ScaI
SspI

Figure 26B

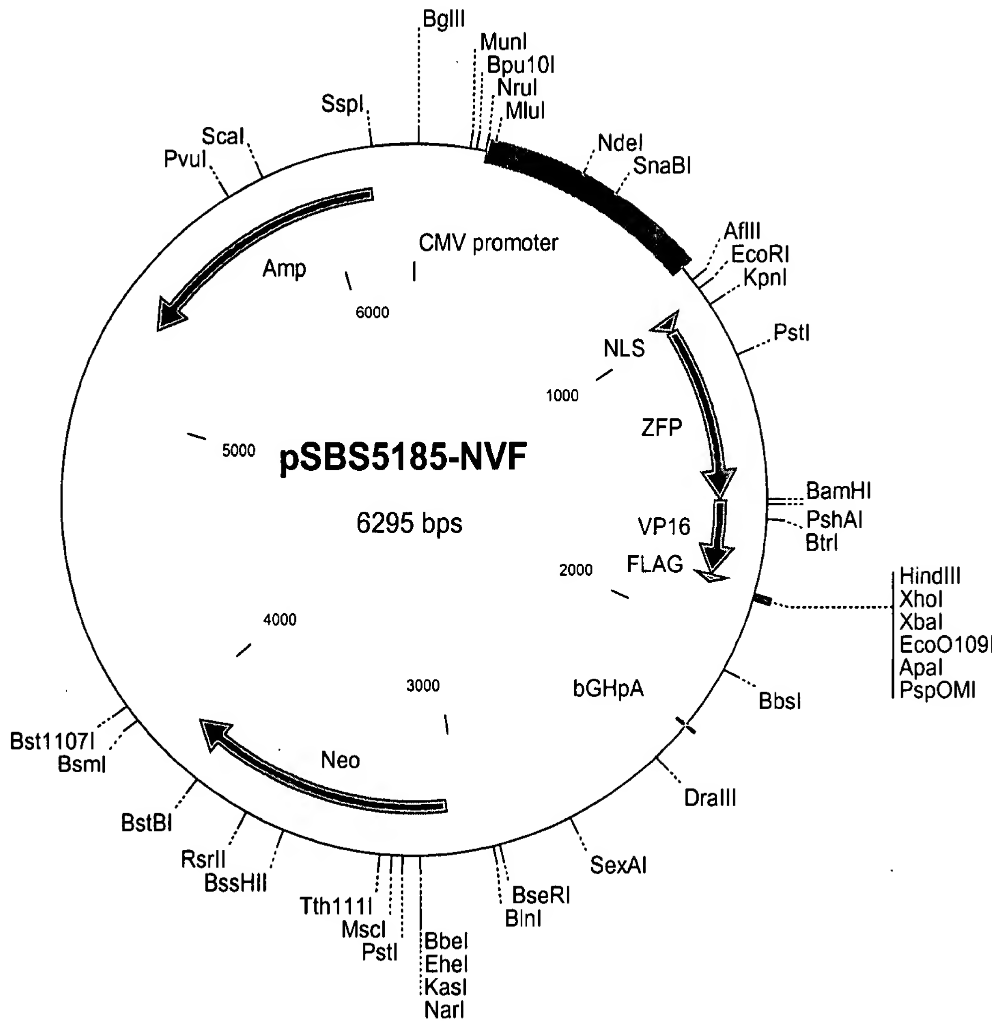
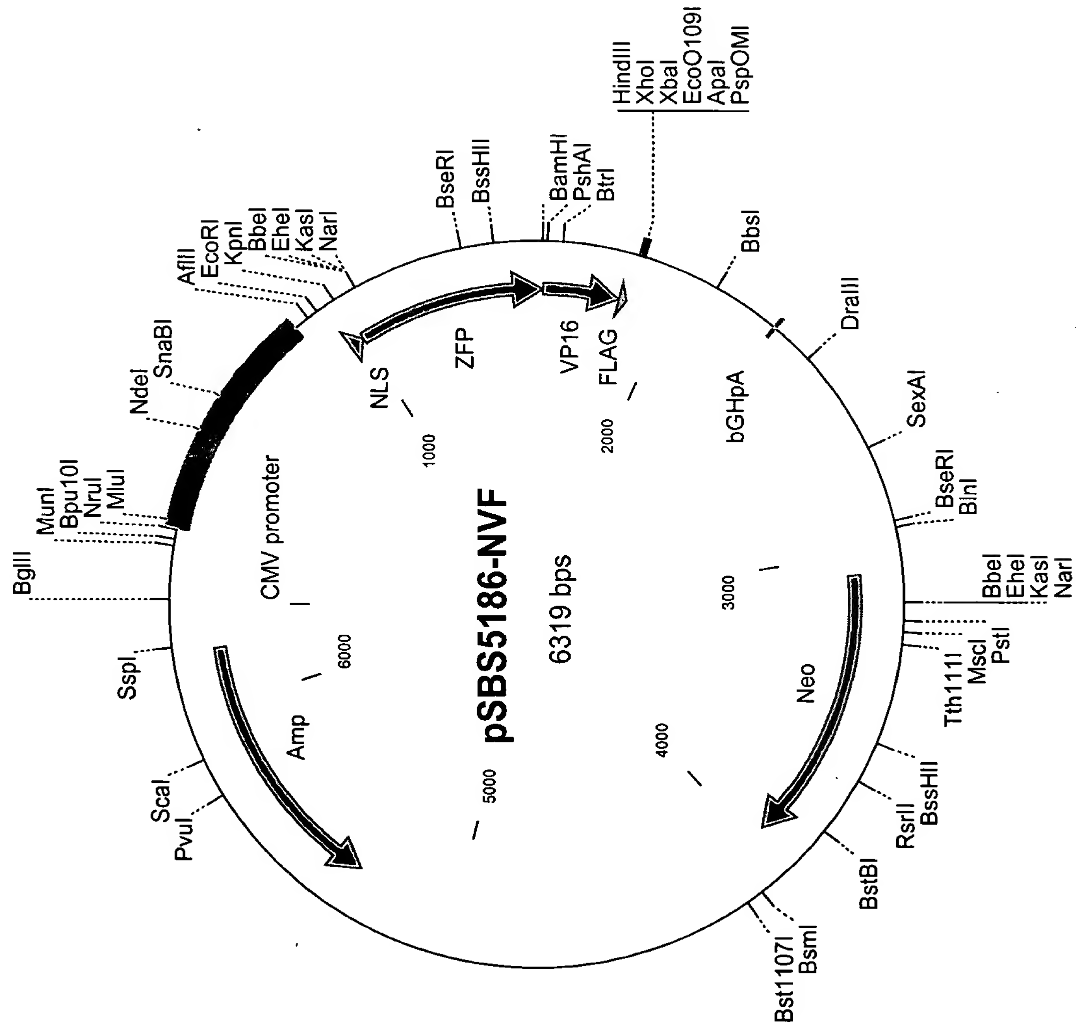

pSBS5185-NVF
6295 bps
CMV promoter
Amp
NLS
ZFP
VP16
FLAG
bGHpA
Neo
1000
2000
3000
4000
5000
6000
BglII
MunI
Bpu10I
NruI
MluI
NdeI
SnaBI
AflII
EcoRI
KpnI
PstI
BamHI
PshAI
BtrI
HindIII
XhoI
XbaI
EcoO109I
ApaI
PspOMI
BbsI
DraIII
SexAI
BseRI
BlnI
BbeI
EheI
KasI
NarI
Tth111I
MscI
PstI
RsrII
BssHII
BstBI
Bst1107I
BsmI
PvuI
ScaI
SspI

Figure 26C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CMV promoter
NLS
ZFP
VP16
FLAG
bGHpA
Neo
Amp
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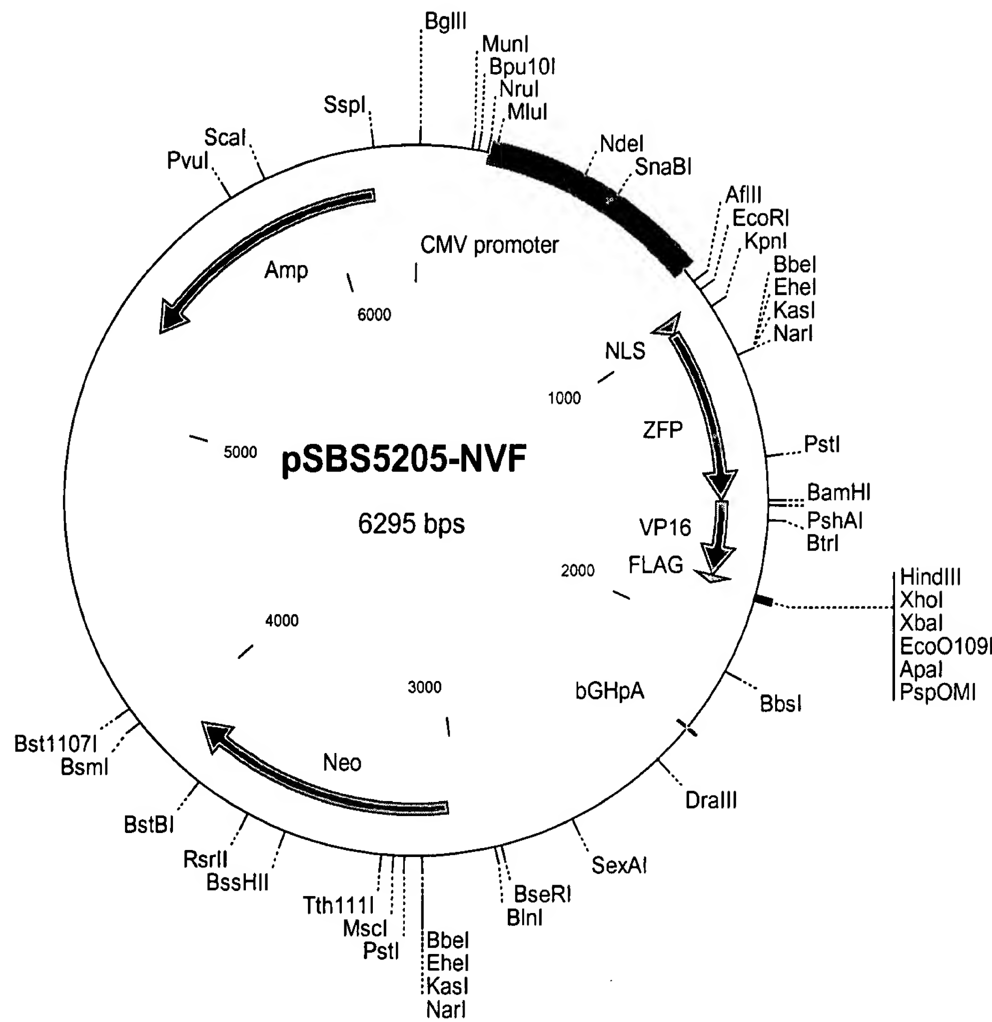
2000
3000
4000
5000
6000
BglII
MunI
Bpu10I
NruI
MluI
NdeI
SnaBI
AflII
EcoRI
KpnI
BbeI
EheI
KasI
NarI
BseRI
BssHII
BamHI
PshAI
BtrI
HindIII
XhoI
XbaI
EcoO109I
ApaI
PspOMI
BbsI
DraIII
SexAI
BseRI
BlnI
BbeI
EheI
KasI
NarI
Tth111I
MscI
PstI
RsrII
BssHII
BstBI
Bst1107I
BsmI
PvuI
ScaI
SspI

Figure 26D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6295 bps
CMV promoter
Amp
NLS
ZFP
VP16
FLAG
bGHpA
Neo
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3000
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6000
BglII
MunI
Bpu10I
NruI
MluI
NdeI
SnaBI
AflII
EcoRI
KpnI
BbeI
EheI
KasI
NarI
PstI
BamHI
PshAI
BtrI
HindIII
XhoI
XbaI
EcoO109I
ApaI
PspOMI
BbsI
DraIII
SexAI
BseRI
BlnI
BbeI
EheI
KasI
NarI
Tth111I
MscI
PstI
RsrII
BssHII
BstBI
Bst1107I
BsmI
PvuI
ScaI
SspI

Figure 26E

```
LOCUS       pSBS5182-N   6319 bp    DNA    CIRCULAR SYN
DEFINITION  Ligation of 5182 into NVF (KpnI, BamHI)
ACCESSION   pSBS5182-N
REFERENCE   1  (bases 1 to 6319)
FEATURES             Location/Qualifiers
     CDS             956..1003
                     /gene="NLS"
                     /product="Nuclear Localization Signal"
     CDS             1004..1597
                     /gene="ZFP"
                     /product="LSR 2B-1A"
     CDS             1598..1840
                     /gene="VP16"
                     /product="VP16 activation domain"
     CDS             1841..1867
                     /gene="FLAG"
                     /product="FLAG epitope"
     CDS             3064..3947
                     /gene="Neo"
                     /product="neomycin resistance"
     CDS             complement (5321..6181)
                     /gene="Amp "
                     /product="Ampcillin resistance"
BASE COUNT     1451 a   1683 c   1651 g   1534 t
ORIGIN
        1 GACGGATCGG GAGATCTCCC GATCCCCTAT GGTCGACTCT CAGTACAATC TGCTCTGATG
       61 CCGCATAGTT AAGCCAGTAT CTGCTCCCTG CTTGTGTGTT GGAGGTCGCT GAGTAGTGCG
      121 CGAGCAAAAT TTAAGCTACA ACAAGGCAAG GCTTGACCGA CAATTGCATG AAGAATCTGC
      181 TTAGGGTTAG GCGTTTTGCG CTGCTTCGCG ATGTACGGGC CAGATATACG CGTTGACATT
      241 GATTATTGAC TAGTTATTAA TAGTAATCAA TTACGGGGTC ATTAGTTCAT AGCCCATATA
      301 TGGAGTTCCG CGTTACATAA CTTACGGTAA ATGGCCCGCC TGGCTGACCG CCCAACGACC
      361 CCCGCCCATT GACGTCAATA ATGACGTATG TTCCCATAGT AACGCCAATA GGGACTTTCC
      421 ATTGACGTCA ATGGGTGGAC TATTTACGGT AAACTGCCCA CTTGGCAGTA CATCAAGTGT
      481 ATCATATGCC AAGTACGCCC CCTATTGACG TCAATGACGG TAAATGGCCC GCCTGGCATT
      541 ATGCCCAGTA CATGACCTTA TGGGACTTTC CTACTTGGCA GTACATCTAC GTATTAGTCA
      601 TCGCTATTAC CATGGTGATG CGGTTTTGGC AGTACATCAA TGGGCGTGGA TAGCGGTTTG
      661 ACTCACGGGG ATTTCCAAGT CTCCACCCCA TTGACGTCAA TGGGAGTTTG TTTTGGCACC
      721 AAAATCAACG GGACTTTCCA AAATGTCGTA ACAACTCCGC CCCATTGACG CAAATGGGCG
      781 GTAGGCGTGT ACGGTGGGAG GTCTATATAA GCAGAGCTCT CTGGCTAACT AGAGAACCCA
      841 CTGCTTACTG GCTTATCGAA ATTAATACGA CTCACTATAG GGAGACCCAA GCTGGCTAGC
      901 GTTTAAACTT AAGCTGATCC ACTAGTCCAG TGTGGTGGAA TTCGCTAGCG CCACCATGGC
      961 CCCCAAGAAG AAGAGGAAGG TGGGAATCCA TGGGGTACCG GGCAAGAAGA AGCAGCACAT
     1021 CTGCCACATC CAGGGCTGTG GTAAAGTTTA CGGCGACCGC TCCAACCTGA CCCGCCACCT
     1081 GCGCTGGCAC ACCGGCGAGA GGCCTTTCAT GTGTACATGG TCCTACTGTG GTAAACGCTT
     1141 CACCCAGTCC GGCGACCTGA CCCGCCACAA GCGTACCCAC ACCGGTGAGA AGAAATTTGC
     1201 TTGTCCGGAA TGTCCGAAGC GCTTCATGAT GTCCCACCAC CTGTCCCGCC ACATCAAGAC
     1261 CCACCAGAAC AAGAAGGGTG GATCTGGTGA TGGTGGCCGT CGCGGTGCCG GTTCTGGCAA
     1321 GAAGAAGCAG CACATCTGCC ACATCCAGGG CTGTGGTAAA GTTTACGGCG AGCGCGGCGA
     1381 CCTGACCCGC CACCTGCGCT GGCACACCGG CGAGAGGCCT TTCATGTGTA CATGGTCCTA
     1441 CTGTGGTAAA CGCTTCACCG ACCCGGGCGC CCTGGTGCGC CACAAGCGTA CCCACACCGG
```

Figure 26F

1501 TGAGAAGAAA TTTGCTTGTC CGGAATGTCC GAAGCGCTTC ATGCGCTCCG ACAACCTGAC
1561 CCAGCACATC AAGACCCACC AGAACAAGAA GGGTGGATCC GCCCCCCCGA CCGATGTCAG
1621 CCTGGGGGAC GAGCTCCACT TAGACGGCGA GGACGTGGCG ATGGCGCATG CCGACGCGCT
1681 AGACGATTTC GATCTGGACA TGTTGGGGGA CGGGGATTCC CCGGGGCCGG GATTTACCCC
1741 CCACGACTCC GCCCCCTACG GCGCTCTGGA TATGGCCGGC TTCGAGTTTG AGCAGATGTT
1801 TACCGATGCC CTTGGAATTG ACGAGTACGG TGGGGGCAGC GACTACAAGG ACGACGATGA
1861 CAAGTAAGCT TCTCGAGTCT AGAGGGCCCG TTTAAACCCG CTGATCAGCC TCGACTGTGC
1921 CTTCTAGTTG CCAGCCATCT GTTGTTTGCC CCTCCCCCGT GCCTTCCTTG ACCCTGGAAG
1981 GTGCCACTCC CACTGTCCTT TCCTAATAAA ATGAGGAAAT TGCATCGCAT TGTCTGAGTA
2041 GGTGTCATTC TATTCTGGGG GGTGGGGTGG GGCAGGACAG CAAGGGGGAG GATTGGGAAG
2101 ACAATAGCAG GCATGCTGGG GATGCGGTGG GCTCTATGGC TTCTGAGGCG GAAAGAACCA
2161 GCTGGGGCTC TAGGGGGTAT CCCCACGCGC CCTGTAGCGG CGCATTAAGC GCGGCGGGTG
2221 TGGTGGTTAC GCGCAGCGTG ACCGCTACAC TTGCCAGCGC CCTAGCGCCC GCTCCTTTCG
2281 CTTTCTTCCC TTCCTTTCTC GCCACGTTCG CCGGCTTTCC CCGTCAAGCT CTAAATCGGG
2341 GCATCCCTTT AGGGTTCCGA TTTAGTGCTT TACGGCACCT CGACCCCAAA AAACTTGATT
2401 AGGGTGATGG TTCACGTAGT GGGCCATCGC CCTGATAGAC GGTTTTTCGC CCTTTGACGT
2461 TGGAGTCCAC GTTCTTTAAT AGTGGACTCT TGTTCCAAAC TGGAACAACA CTCAACCCTA
2521 TCTCGGTCTA TTCTTTTGAT TTATAAGGGA TTTTGGGGAT TTCGGCCTAT TGGTTAAAAA
2581 ATGAGCTGAT TTAACAAAAA TTTAACGCGA ATTAATTCTG TGGAATGTGT GTCAGTTAGG
2641 GTGTGGAAAG TCCCCAGGCT CCCCAGGCAG GCAGAAGTAT GCAAAGCATG CATCTCAATT
2701 AGTCAGCAAC CAGGTGTGGA AAGTCCCCAG GCTCCCCAGC AGGCAGAAGT ATGCAAAGCA
2761 TGCATCTCAA TTAGTCAGCA ACCATAGTCC CGCCCCTAAC TCCGCCCATC CCGCCCCTAA
2821 CTCCGCCCAG TTCCGCCCAT TCTCCGCCCC ATGGCTGACT AATTTTTTTT ATTTATGCAG
2881 AGGCCGAGGC CGCCTCTGCC TCTGAGCTAT TCCAGAAGTA GTGAGGAGGC TTTTTTGGAG
2941 GCCTAGGCTT TTGCAAAAAG CTCCCGGGAG CTTGTATATC CATTTTCGGA TCTGATCAAG
3001 AGACAGGATG AGGATCGTTT CGCATGATTG AACAAGATGG ATTGCACGCA GGTTCTCCGG
3061 CCGCTTGGGT GGAGAGGCTA TTCGGCTATG ACTGGGCACA ACAGACAATC GGCTGCTCTG
3121 ATGCCGCCGT GTTCCGGCTG TCAGCGCAGG GGCGCCCGGT TCTTTTTGTC AAGACCGACC
3181 TGTCCGGTGC CCTGAATGAA CTGCAGGACG AGGCAGCGCG GCTATCGTGG CTGGCCACGA
3241 CGGGCGTTCC TTGCGCAGCT GTGCTCGACG TTGTCACTGA AGCGGGAAGG GACTGGCTGC
3301 TATTGGGCGA AGTGCCGGGG CAGGATCTCC TGTCATCTCA CCTTGCTCCT GCCGAGAAAG
3361 TATCCATCAT GGCTGATGCA ATGCGGCGGC TGCATACGCT TGATCCGGCT ACCTGCCCAT
3421 TCGACCACCA AGCGAAACAT CGCATCGAGC GAGCACGTAC TCGGATGGAA GCCGGTCTTG
3481 TCGATCAGGA TGATCTGGAC GAAGAGCATC AGGGGCTCGC GCCAGCCGAA CTGTTCGCCA
3541 GGCTCAAGGC GCGCATGCCC GACGGCGAGG ATCTCGTCGT GACCCATGGC GATGCCTGCT
3601 TGCCGAATAT CATGGTGGAA AATGGCCGCT TTTCTGGATT CATCGACTGT GGCCGGCTGG
3661 GTGTGGCGGA CCGCTATCAG GACATAGCGT TGGCTACCCG TGATATTGCT GAAGAGCTTG
3721 GCGGCGAATG GGCTGACCGC TTCCTCGTGC TTTACGGTAT CGCCGCTCCC GATTCGCAGC
3781 GCATCGCCTT CTATCGCCTT CTTGACGAGT TCTTCTGAGC GGGACTCTGG GGTTCGAAAT
3841 GACCGACCAA GCGACGCCCA ACCTGCCATC ACGAGATTTC GATTCCACCG CCGCCTTCTA
3901 TGAAAGGTTG GGCTTCGGAA TCGTTTTCCG GGACGCCGGC TGGATGATCC TCCAGCGCGG
3961 GGATCTCATG CTGGAGTTCT TCGCCCACCC CAACTTGTTT ATTGCAGCTT ATAATGGTTA
4021 CAAATAAAGC AATAGCATCA CAAATTTCAC AAATAAAGCA TTTTTTTCAC TGCATTCTAG
4081 TTGTGGTTTG TCCAAACTCA TCAATGTATC TTATCATGTC TGTATACCGT CGACCTCTAG
4141 CTAGAGCTTG GCGTAATCAT GGTCATAGCT GTTTCCTGTG TGAAATTGTT ATCCGCTCAC
4201 AATTCCACAC AACATACGAG CCGGAAGCAT AAAGTGTAAA GCCTGGGGTG CCTAATGAGT
4261 GAGCTAACTC ACATTAATTG CGTTGCGCTC ACTGCCCGCT TTCCAGTCGG GAAACCTGTC
4321 GTGCCAGCTG CATTAATGAA TCGGCCAACG CGCGGGGAGA GGCGGTTTGC GTATTGGGCG
4381 CTCTTCCGCT TCCTCGCTCA CTGACTCGCT GCGCTCGGTC GTTCGGCTGC GGCGAGCGGT

Figure 26G

4441 ATCAGCTCAC TCAAAGGCGG TAATACGGTT ATCCACAGAA TCAGGGGATA ACGCAGGAAA
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4561 GTTTTTCCAT AGGCTCCGCC CCCCTGACGA GCATCACAAA AATCGACGCT CAAGTCAGAG
4621 GTGGCGAAAC CCGACAGGAC TATAAAGATA CCAGGCGTTT CCCCCTGGAA GCTCCCTCGT
4681 GCGCTCTCCT GTTCCGACCC TGCCGCTTAC CGGATACCTG TCCGCCTTTC TCCCTTCGGG
4741 AAGCGTGGCG CTTTCTCAAT GCTCACGCTG TAGGTATCTC AGTTCGGTGT AGGTCGTTCG
4801 CTCCAAGCTG GGCTGTGTGC ACGAACCCCC CGTTCAGCCC GACCGCTGCG CCTTATCCGG
4861 TAACTATCGT CTTGAGTCCA ACCCGGTAAG ACACGACTTA TCGCCACTGG CAGCAGCCAC
4921 TGGTAACAGG ATTAGCAGAG CGAGGTATGT AGGCGGTGCT ACAGAGTTCT TGAAGTGGTG
4981 GCCTAACTAC GGCTACACTA GAAGGACAGT ATTTGGTATC TGCGCTCTGC TGAAGCCAGT
5041 TACCTTCGGA AAAAGAGTTG GTAGCTCTTG ATCCGGCAAA CAAACCACCG CTGGTAGCGG
5101 TGGTTTTTTT GTTTGCAAGC AGCAGATTAC GCGCAGAAAA AAAGGATCTC AAGAAGATCC
5161 TTTGATCTTT TCTACGGGGT CTGACGCTCA GTGGAACGAA AACTCACGTT AAGGGATTTT
5221 GGTCATGAGA TTATCAAAAA GGATCTTCAC CTAGATCCTT TTAAATTAAA AATGAAGTTT
5281 TAAATCAATC TAAAGTATAT ATGAGTAAAC TTGGTCTGAC AGTTACCAAT GCTTAATCAG
5341 TGAGGCACCT ATCTCAGCGA TCTGTCTATT TCGTTCATCC ATAGTTGCCT GACTCCCCGT
5401 CGTGTAGATA ACTACGATAC GGGAGGGCTT ACCATCTGGC CCCAGTGCTG CAATGATACC
5461 GCGAGACCCA CGCTCACCGG CTCCAGATTT ATCAGCAATA AACCAGCCAG CCGGAAGGGC
5521 CGAGCGCAGA AGTGGTCCTG CAACTTTATC CGCCTCCATC CAGTCTATTA ATTGTTGCCG
5581 GGAAGCTAGA GTAAGTAGTT CGCCAGTTAA TAGTTTGCGC AACGTTGTTG CCATTGCTAC
5641 AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA TTCAGCTCCG GTTCCCAACG
5701 ATCAAGGCGA GTTACATGAT CCCCCATGTT GTGCAAAAAA GCGGTTAGCT CCTTCGGTCC
5761 TCCGATCGTT GTCAGAAGTA AGTTGGCCGC AGTGTTATCA CTCATGGTTA TGGCAGCACT
5821 GCATAATTCT CTTACTGTCA TGCCATCCGT AAGATGCTTT TCTGTGACTG GTGAGTACTC
5881 AACCAAGTCA TTCTGAGAAT AGTGTATGCG GCGACCGAGT TGCTCTTGCC CGGCGTCAAT
5941 ACGGGATAAT ACCGCGCCAC ATAGCAGAAC TTTAAAAGTG CTCATCATTG GAAAACGTTC
6001 TTCGGGGCGA AAACTCTCAA GGATCTTACC GCTGTTGAGA TCCAGTTCGA TGTAACCCAC
6061 TCGTGCACCC AACTGATCTT CAGCATCTTT TACTTTCACC AGCGTTTCTG GGTGAGCAAA
6121 AACAGGAAGG CAAAATGCCG CAAAAAAGGG AATAAGGGCG ACACGGAAAT GTTGAATACT
6181 CATACTCTTC CTTTTTCAAT ATTATTGAAG CATTTATCAG GGTTATTGTC TCATGAGCGG
6241 ATACATATTT GAATGTATTT AGAAAAATAA ACAAATAGGG GTTCCGCGCA CATTTCCCCG
6301 AAAAGTGCCA CCTGACGTC

//

Figure 26H

```
LOCUS         pSBS5183-N   6319 bp    DNA    CIRCULAR SYN
DEFINITION    Ligation of 5183 into NVF (KpnI, BamHI)
ACCESSION     pSBS5183-N
REFERENCE     1  (bases 1 to 6319)
FEATURES               Location/Qualifiers
     CDS               956..1003
                       /gene="NLS"
                       /product="Nuclear Localization Signal"
     CDS               1004..1597
                       /gene="ZFP"
                       /product="LSR 4A-3A"
     CDS               1598..1840
                       /gene="VP16"
                       /product="VP16 activation domain"
     CDS               1841..1867
                       /gene="FLAG"
                       /product="FLAG epitope"
     CDS               3064..3947
                       /gene="Neo"
                       /product="neomycin resistance"
     CDS               complement (5321..6181)
                       /gene="Amp "
                       /product="Ampcillin resistance"
BASE COUNT     1446 a   1683 c   1655 g   1535 t
ORIGIN
        1 GACGGATCGG GAGATCTCCC GATCCCCTAT GGTCGACTCT CAGTACAATC TGCTCTGATG
       61 CCGCATAGTT AAGCCAGTAT CTGCTCCCTG CTTGTGTGTT GGAGGTCGCT GAGTAGTGCG
      121 CGAGCAAAAT TTAAGCTACA ACAAGGCAAG GCTTGACCGA CAATTGCATG AAGAATCTGC
      181 TTAGGGTTAG GCGTTTTGCG CTGCTTCGCG ATGTACGGGC CAGATATACG CGTTGACATT
      241 GATTATTGAC TAGTTATTAA TAGTAATCAA TTACGGGGTC ATTAGTTCAT AGCCCATATA
      301 TGGAGTTCCG CGTTACATAA CTTACGGTAA ATGGCCCGCC TGGCTGACCG CCCAACGACC
      361 CCCGCCCATT GACGTCAATA ATGACGTATG TTCCCATAGT AACGCCAATA GGGACTTTCC
      421 ATTGACGTCA ATGGGTGGAC TATTTACGGT AAACTGCCCA CTTGGCAGTA CATCAAGTGT
      481 ATCATATGCC AAGTACGCCC CCTATTGACG TCAATGACGG TAAATGGCCC GCCTGGCATT
      541 ATGCCCAGTA CATGACCTTA TGGGACTTTC CTACTTGGCA GTACATCTAC GTATTAGTCA
      601 TCGCTATTAC CATGGTGATG CGGTTTTGGC AGTACATCAA TGGGCGTGGA TAGCGGTTTG
      661 ACTCACGGGG ATTTCCAAGT CTCCACCCCA TTGACGTCAA TGGGAGTTTG TTTTGGCACC
      721 AAAATCAACG GGACTTTCCA AAATGTCGTA ACAACTCCGC CCCATTGACG CAAATGGGCG
      781 GTAGGCGTGT ACGGTGGGAG GTCTATATAA GCAGAGCTCT CTGGCTAACT AGAGAACCCA
      841 CTGCTTACTG GCTTATCGAA ATTAATACGA CTCACTATAG GGAGACCCAA GCTGGCTAGC
      901 GTTTAAACTT AAGCTGATCC ACTAGTCCAG TGTGGTGGAA TTCGCTAGCG CCACCATGGC
      961 CCCCAAGAAG AAGAGGAAGG TGGGAATCCA TGGGGTACCG GGCAAGAAGA AGCAGCACAT
     1021 CTGCCACATC CAGGGCTGTG GTAAAGTTTA CGGCCAGTCC GGCCACCTGG CCCGCCACCT
     1081 GCGCTGGCAC ACCGGCGAGA GGCCTTTCAT GTGTACATGG TCCTACTGTG GTAAACGCTT
     1141 CACCACCTCC GGCGAGCTGG TGCGCCACAA GCGTACCCAC ACCGGTGAGA AGAAATTTGC
     1201 TTGTCCGGAA TGTCCGAAGC GCTTCATGCG TTCCGACCAC CTGTCCCGTC ACATCAAGAC
     1261 CCACCAGAAC AAGAAGGGTG GATCTGGTGA TGGTGGCCGT CGCGGTGGCG GTTCTGGCAA
     1321 GAAGAAGCAG CACATCTGCC ACATCCAGGG CTGTGGTAAA GTTTACGGCG AGCGCGGCGA
     1381 CCTGACCCGC CACCTGCGCT GGCACACCGG CGAGAGGCCT TTCATGTGTA CATGGTCCTA
```

Figure 26I

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1501 TGAGAAGAAA TTTGCTTGTC CGGAATGTCC GAAGCGCTTC ATGCGCTCCG ACGCCCTGAC
1561 CCGCCACATC AAGACCCACC AGAACAAGAA GGGTGGATCC GCCCCCCCGA CCGATGTCAG
1621 CCTGGGGGAC GAGCTCCACT TAGACGGCGA GGACGTGGCG ATGGCGCATG CCGACGCGCT
1681 AGACGATTTC GATCTGGACA TGTTGGGGGA CGGGGATTCC CCGGGGCCGG GATTTACCCC
1741 CCACGACTCC GCCCCCTACG GCGCTCTGGA TATGGCCGGC TTCGAGTTTG AGCAGATGTT
1801 TACCGATGCC CTTGGAATTG ACGAGTACGG TGGGGGCAGC GACTACAAGG ACGACGATGA
1861 CAAGTAAGCT TCTCGAGTCT AGAGGGCCCG TTTAAACCCG CTGATCAGCC TCGACTGTGC
1921 CTTCTAGTTG CCAGCCATCT GTTGTTTGCC CCTCCCCCGT GCCTTCCTTG ACCCTGGAAG
1981 GTGCCACTCC CACTGTCCTT TCCTAATAAA ATGAGGAAAT TGCATCGCAT TGTCTGAGTA
2041 GGTGTCATTC TATTCTGGGG GGTGGGGTGG GGCAGGACAG CAAGGGGGAG GATTGGGAAG
2101 ACAATAGCAG GCATGCTGGG GATGCGGTGG GCTCTATGGC TTCTGAGGCG GAAAGAACCA
2161 GCTGGGGCTC TAGGGGGTAT CCCCACGCGC CCTGTAGCGG CGCATTAAGC GCGGCGGGTG
2221 TGGTGGTTAC GCGCAGCGTG ACCGCTACAC TTGCCAGCGC CCTAGCGCCC GCTCCTTTCG
2281 CTTTCTTCCC TTCCTTTCTC GCCACGTTCG CCGGCTTTCC CCGTCAAGCT CTAAATCGGG
2341 GCATCCCTTT AGGGTTCCGA TTTAGTGCTT TACGGCACCT CGACCCCAAA AAACTTGATT
2401 AGGGTGATGG TTCACGTAGT GGGCCATCGC CCTGATAGAC GGTTTTTCGC CCTTTGACGT
2461 TGGAGTCCAC GTTCTTTAAT AGTGGACTCT TGTTCCAAAC TGGAACAACA CTCAACCCTA
2521 TCTCGGTCTA TTCTTTTGAT TTATAAGGGA TTTTGGGGAT TTCGGCCTAT TGGTTAAAAA
2581 ATGAGCTGAT TTAACAAAAA TTTAACGCGA ATTAATTCTG TGGAATGTGT GTCAGTTAGG
2641 GTGTGGAAAG TCCCCAGGCT CCCCAGGCAG GCAGAAGTAT GCAAAGCATG CATCTCAATT
2701 AGTCAGCAAC CAGGTGTGGA AAGTCCCCAG GCTCCCCAGC AGGCAGAAGT ATGCAAAGCA
2761 TGCATCTCAA TTAGTCAGCA ACCATAGTCC CGCCCCTAAC TCCGCCCATC CCGCCCCTAA
2821 CTCCGCCCAG TTCCGCCCAT TCTCCGCCCC ATGGCTGACT AATTTTTTTT ATTTATGCAG
2881 AGGCCGAGGC CGCCTCTGCC TCTGAGCTAT TCCAGAAGTA GTGAGGAGGC TTTTTTGGAG
2941 GCCTAGGCTT TTGCAAAAAG CTCCCGGGAG CTTGTATATC CATTTTCGGA TCTGATCAAG
3001 AGACAGGATG AGGATCGTTT CGCATGATTG AACAAGATGG ATTGCACGCA GGTTCTCCGG
3061 CCGCTTGGGT GGAGAGGCTA TTCGGCTATG ACTGGGCACA ACAGACAATC GGCTGCTCTG
3121 ATGCCGCCGT GTTCCGGCTG TCAGCGCAGG GGCGCCCGGT TCTTTTTGTC AAGACCGACC
3181 TGTCCGGTGC CCTGAATGAA CTGCAGGACG AGGCAGCGCG GCTATCGTGG CTGGCCACGA
3241 CGGGCGTTCC TTGCGCAGCT GTGCTCGACG TTGTCACTGA AGCGGGAAGG GACTGGCTGC
3301 TATTGGGCGA AGTGCCGGGG CAGGATCTCC TGTCATCTCA CCTTGCTCCT GCCGAGAAAG
3361 TATCCATCAT GGCTGATGCA ATGCGGCGGC TGCATACGCT TGATCCGGCT ACCTGCCCAT
3421 TCGACCACCA AGCGAAACAT CGCATCGAGC GAGCACGTAC TCGGATGGAA GCCGGTCTTG
3481 TCGATCAGGA TGATCTGGAC GAAGAGCATC AGGGGCTCGC GCCAGCCGAA CTGTTCGCCA
3541 GGCTCAAGGC GCGCATGCCC GACGGCGAGG ATCTCGTCGT GACCCATGGC GATGCCTGCT
3601 TGCCGAATAT CATGGTGGAA AATGGCCGCT TTTCTGGATT CATCGACTGT GGCCGGCTGG
3661 GTGTGGCGGA CCGCTATCAG GACATAGCGT TGGCTACCCG TGATATTGCT GAAGAGCTTG
3721 GCGGCGAATG GGCTGACCGC TTCCTCGTGC TTTACGGTAT CGCCGCTCCC GATTCGCAGC
3781 GCATCGCCTT CTATCGCCTT CTTGACGAGT TCTTCTGAGC GGGACTCTGG GGTTCGAAAT
3841 GACCGACCAA GCGACGCCCA ACCTGCCATC ACGAGATTTC GATTCCACCG CCGCCTTCTA
3901 TGAAAGGTTG GGCTTCGGAA TCGTTTTCCG GGACGCCGGC TGGATGATCC TCCAGCGCGG
3961 GGATCTCATG CTGGAGTTCT TCGCCCACCC CAACTTGTTT ATTGCAGCTT ATAATGGTTA
4021 CAAATAAAGC AATAGCATCA CAAATTTCAC AAATAAAGCA TTTTTTTCAC TGCATTCTAG
4081 TTGTGGTTTG TCCAAACTCA TCAATGTATC TTATCATGTC TGTATACCGT CGACCTCTAG
4141 CTAGAGCTTG GCGTAATCAT GGTCATAGCT GTTTCCTGTG TGAAATTGTT ATCCGCTCAC
4201 AATTCCACAC AACATACGAG CCGGAAGCAT AAAGTGTAAA GCCTGGGGTG CCTAATGAGT
4261 GAGCTAACTC ACATTAATTG CGTTGCGCTC ACTGCCCGCT TTCCAGTCGG GAAACCTGTC
4321 GTGCCAGCTG CATTAATGAA TCGGCCAACG CGCGGGGAGA GGCGGTTTGC GTATTGGGCG
4381 CTCTTCCGCT TCCTCGCTCA CTGACTCGCT GCGCTCGGTC GTTCGGCTGC GGCGAGCGGT
4441 ATCAGCTCAC TCAAAGGCGG TAATACGGTT ATCCACAGAA TCAGGGGATA ACGCAGGAAA

Figure 26J

4501 GAACATGTGA GCAAAAGGCC AGCAAAAGGC CAGGAACCGT AAAAAGGCCG CGTTGCTGGC
4561 GTTTTTCCAT AGGCTCCGCC CCCCTGACGA GCATCACAAA AATCGACGCT CAAGTCAGAG
4621 GTGGCGAAAC CCGACAGGAC TATAAAGATA CCAGGCGTTT CCCCCTGGAA GCTCCCTCGT
4681 GCGCTCTCCT GTTCCGACCC TGCCGCTTAC CGGATACCTG TCCGCCTTTC TCCCTTCGGG
4741 AAGCGTGGCG CTTTCTCAAT GCTCACGCTG TAGGTATCTC AGTTCGGTGT AGGTCGTTCG
4801 CTCCAAGCTG GGCTGTGTGC ACGAACCCCC CGTTCAGCCC GACCGCTGCG CCTTATCCGG
4861 TAACTATCGT CTTGAGTCCA ACCCGGTAAG ACACGACTTA TCGCCACTGG CAGCAGCCAC
4921 TGGTAACAGG ATTAGCAGAG CGAGGTATGT AGGCGGTGCT ACAGAGTTCT TGAAGTGGTG
4981 GCCTAACTAC GGCTACACTA GAAGGACAGT ATTTGGTATC TGCGCTCTGC TGAAGCCAGT
5041 TACCTTCGGA AAAAGAGTTG GTAGCTCTTG ATCCGGCAAA CAAACCACCG CTGGTAGCGG
5101 TGGTTTTTTT GTTTGCAAGC AGCAGATTAC GCGCAGAAAA AAAGGATCTC AAGAAGATCC
5161 TTTGATCTTT TCTACGGGGT CTGACGCTCA GTGGAACGAA AACTCACGTT AAGGGATTTT
5221 GGTCATGAGA TTATCAAAAA GGATCTTCAC CTAGATCCTT TTAAATTAAA AATGAAGTTT
5281 TAAATCAATC TAAAGTATAT ATGAGTAAAC TTGGTCTGAC AGTTACCAAT GCTTAATCAG
5341 TGAGGCACCT ATCTCAGCGA TCTGTCTATT TCGTTCATCC ATAGTTGCCT GACTCCCCGT
5401 CGTGTAGATA ACTACGATAC GGGAGGGCTT ACCATCTGGC CCCAGTGCTG CAATGATACC
5461 GCGAGACCCA CGCTCACCGG CTCCAGATTT ATCAGCAATA AACCAGCCAG CCGGAAGGGC
5521 CGAGCGCAGA AGTGGTCCTG CAACTTTATC CGCCTCCATC CAGTCTATTA ATTGTTGCCG
5581 GGAAGCTAGA GTAAGTAGTT CGCCAGTTAA TAGTTTGCGC AACGTTGTTG CCATTGCTAC
5641 AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA TTCAGCTCCG GTTCCCAACG
5701 ATCAAGGCGA GTTACATGAT CCCCCATGTT GTGCAAAAAA GCGGTTAGCT CCTTCGGTCC
5761 TCCGATCGTT GTCAGAAGTA AGTTGGCCGC AGTGTTATCA CTCATGGTTA TGGCAGCACT
5821 GCATAATTCT CTTACTGTCA TGCCATCCGT AAGATGCTTT TCTGTGACTG GTGAGTACTC
5881 AACCAAGTCA TTCTGAGAAT AGTGTATGCG GCGACCGAGT TGCTCTTGCC CGGCGTCAAT
5941 ACGGGATAAT ACCGCGCCAC ATAGCAGAAC TTTAAAAGTG CTCATCATTG GAAAACGTTC
6001 TTCGGGGCGA AAACTCTCAA GGATCTTACC GCTGTTGAGA TCCAGTTCGA TGTAACCCAC
6061 TCGTGCACCC AACTGATCTT CAGCATCTTT TACTTTCACC AGCGTTTCTG GGTGAGCAAA
6121 AACAGGAAGG CAAAATGCCG CAAAAAAGGG AATAAGGGCG ACACGGAAAT GTTGAATACT
6181 CATACTCTTC CTTTTTCAAT ATTATTGAAG CATTTATCAG GGTTATTGTC TCATGAGCGG
6241 ATACATATTT GAATGTATTT AGAAAAATAA ACAAATAGGG GTTCCGCGCA CATTTCCCCG
6301 AAAAGTGCCA CCTGACGTC

Figure 26K

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LOCUS       pSBS5185-N   6295 bp    DNA   CIRCULAR SYN
DEFINITION  Ligation of 5185 into NVF (KpnI, BamHI)
ACCESSION   pSBS5185-N
REFERENCE   1  (bases 1 to 6295)
FEATURES             Location/Qualifiers
     CDS             956..1003
                     /gene="NLS"
                     /product="Nuclear Localization Signal"
     CDS             1004..1573
                     /gene="ZFP"
                     /product="LSR 6A-5A"
     CDS             1574..1816
                     /gene="VP16"
                     /product="VP16 activation domain"
     CDS             1817..1843
                     /gene="FLAG"
                     /product="FLAG epitope"
     CDS             3040..3923
                     /gene="Neo"
                     /product="neomycin resistance"
     CDS             complement (5297..6157)
                     /gene="Amp "
                     /product="Ampcillin resistance"
BASE COUNT     1452 a    1682 c    1635 g    1526 t
ORIGIN
        1 GACGGATCGG GAGATCTCCC GATCCCCTAT GGTCGACTCT CAGTACAATC TGCTCTGATG
       61 CCGCATAGTT AAGCCAGTAT CTGCTCCCTG CTTGTGTGTT GGAGGTCGCT GAGTAGTGCG
      121 CGAGCAAAAT TTAAGCTACA ACAAGGCAAG GCTTGACCGA CAATTGCATG AAGAATCTGC
      181 TTAGGGTTAG GCGTTTTGCG CTGCTTCGCG ATGTACGGGC CAGATATACG CGTTGACATT
      241 GATTATTGAC TAGTTATTAA TAGTAATCAA TTACGGGGTC ATTAGTTCAT AGCCCATATA
      301 TGGAGTTCCG CGTTACATAA CTTACGGTAA ATGGCCCGCC TGGCTGACCG CCCAACGACC
      361 CCCGCCCATT GACGTCAATA ATGACGTATG TTCCCATAGT AACGCCAATA GGGACTTTCC
      421 ATTGACGTCA ATGGGTGGAC TATTTACGGT AAACTGCCCA CTTGGCAGTA CATCAAGTGT
      481 ATCATATGCC AAGTACGCCC CCTATTGACG TCAATGACGG TAAATGGCCC GCCTGGCATT
      541 ATGCCCAGTA CATGACCTTA TGGGACTTTC CTACTTGGCA GTACATCTAC GTATTAGTCA
      601 TCGCTATTAC CATGGTGATG CGGTTTTGGC AGTACATCAA TGGGCGTGGA TAGCGGTTTG
      661 ACTCACGGGG ATTTCCAAGT CTCCACCCCA TTGACGTCAA TGGGAGTTTG TTTTGGCACC
      721 AAAATCAACG GGACTTTCCA AAATGTCGTA ACAACTCCGC CCCATTGACG CAAATGGGCG
      781 GTAGGCGTGT ACGGTGGGAG GTCTATATAA GCAGAGCTCT CTGGCTAACT AGAGAACCCA
      841 CTGCTTACTG GCTTATCGAA ATTAATACGA CTCACTATAG GGAGACCCAA GCTGGCTAGC
      901 GTTTAAACTT AAGCTGATCC ACTAGTCCAG TGTGGTGGAA TTCGCTAGCG CCACCATGGC
      961 CCCCAAGAAG AAGAGGAAGG TGGGAATCCA TGGGGTACCG GGCAAGAAGA AGCAGCACAT
     1021 CTGCCACATC CAGGGCTGTG GTAAAGTTTA CGGCCGCTCC GACCACCTGG CCCGCCACCT
     1081 GCGCTGGCAC ACCGGCGAGA GGCCTTTCAT GTGTACATGG TCCTACTGTG GTAAACGCTT
     1141 CACCCGCTCC GACGAGCTGC AGCGCCACAA GCGTACCCAC ACCGGTGAGA AGAAATTTGC
     1201 TTGTCCGGAA TGTCCGAAGC GCTTCATGCG CTCCGACGAG CGCAAGCGCC ACATCAAGAC
     1261 CCACCAGAAC AAGAAGGGTG GATCTGGTGA TGGCAAGAAG AAGCAGCACA TCTGCCACAT
     1321 CCAGGGCTGT GGTAAAGTTT ACGGCCGCTC CGACCACCTG ACCACCCACC TGCGCTGGCA
     1381 CACCGGCGAG AGGCCTTTCA TGTGTACATG GTCCTACTGT GGTAAACGCT TCACCCGCTC
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Figure 26L

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1441 CGACCACCTG ACCCGCCACA AGCGTACCCA CACCGGTGAG AAGAAATTTG CTTGTCCGGA
1501 ATGTCCGAAG CGCTTCATGC GCTCCGACCA CCTGACCACC CACATCAAGA CCCACCAGAA
1561 CAAGAAGGGT GGATCCGCCC CCCCGACCGA TGTCAGCCTG GGGGACGAGC TCCACTTAGA
1621 CGGCGAGGAC GTGGCGATGG CGCATGCCGA CGCGCTAGAC GATTTCGATC TGGACATGTT
1681 GGGGGACGGG GATTCCCCGG GGCCGGGATT TACCCCCCAC GACTCCGCCC CCTACGGCGC
1741 TCTGGATATG GCCGGCTTCG AGTTTGAGCA GATGTTTACC GATGCCCTTG GAATTGACGA
1801 GTACGGTGGG GGCAGCGACT ACAAGGACGA CGATGACAAG TAAGCTTCTC GAGTCTAGAG
1861 GGCCCGTTTA AACCCGCTGA TCAGCCTCGA CTGTGCCTTC TAGTTGCCAG CCATCTGTTG
1921 TTTGCCCCTC CCCCGTGCCT TCCTTGACCC TGGAAGGTGC CACTCCCACT GTCCTTTCCT
1981 AATAAAATGA GGAAATTGCA TCGCATTGTC TGAGTAGGTG TCATTCTATT CTGGGGGGTG
2041 GGGTGGGGCA GGACAGCAAG GGGGAGGATT GGGAAGACAA TAGCAGGCAT GCTGGGGATG
2101 CGGTGGGCTC TATGGCTTCT GAGGCGGAAA GAACCAGCTG GGGCTCTAGG GGGTATCCCC
2161 ACGCGCCCTG TAGCGGCGCA TTAAGCGCGG CGGGTGTGGT GGTTACGCGC AGCGTGACCG
2221 CTACACTTGC CAGCGCCCTA GCGCCCGCTC CTTTCGCTTT CTTCCCTTCC TTTCTCGCCA
2281 CGTTCGCCGG CTTTCCCCGT CAAGCTCTAA ATCGGGGCAT CCCTTTAGGG TTCCGATTTA
2341 GTGCTTTACG GCACCTCGAC CCCAAAAAAC TTGATTAGGG TGATGGTTCA CGTAGTGGGC
2401 CATCGCCCTG ATAGACGGTT TTTCGCCCTT TGACGTTGGA GTCCACGTTC TTTAATAGTG
2461 GACTCTTGTT CCAAACTGGA ACAACACTCA ACCCTATCTC GGTCTATTCT TTTGATTTAT
2521 AAGGGATTTT GGGGATTTCG GCCTATTGGT TAAAAAATGA GCTGATTTAA CAAAAATTTA
2581 ACGCGAATTA ATTCTGTGGA ATGTGTGTCA GTTAGGGTGT GGAAAGTCCC CAGGCTCCCC
2641 AGGCAGGCAG AAGTATGCAA AGCATGCATC TCAATTAGTC AGCAACCAGG TGTGGAAAGT
2701 CCCCAGGCTC CCCAGCAGGC AGAAGTATGC AAAGCATGCA TCTCAATTAG TCAGCAACCA
2761 TAGTCCCGCC CCTAACTCCG CCCATCCCGC CCCTAACTCC GCCCAGTTCC GCCCATTCTC
2821 CGCCCCATGG CTGACTAATT TTTTTTATTT ATGCAGAGGC CGAGGCCGCC TCTGCCTCTG
2881 AGCTATTCCA GAAGTAGTGA GGAGGCTTTT TTGGAGGCCT AGGCTTTTGC AAAAAGCTCC
2941 CGGGAGCTTG TATATCCATT TTCGGATCTG ATCAAGAGAC AGGATGAGGA TCGTTTCGCA
3001 TGATTGAACA AGATGGATTG CACGCAGGTT CTCCGGCCGC TTGGGTGGAG AGGCTATTCG
3061 GCTATGACTG GGCACAACAG ACAATCGGCT GCTCTGATGC CGCCGTGTTC CGGCTGTCAG
3121 CGCAGGGGCG CCCGGTTCTT TTTGTCAAGA CCGACCTGTC CGGTGCCCTG AATGAACTGC
3181 AGGACGAGGC AGCGCGGCTA TCGTGGCTGG CCACGACGGG CGTTCCTTGC GCAGCTGTGC
3241 TCGACGTTGT CACTGAAGCG GGAAGGGACT GGCTGCTATT GGGCGAAGTG CCGGGGCAGG
3301 ATCTCCTGTC ATCTCACCTT GCTCCTGCCG AGAAAGTATC CATCATGGCT GATGCAATGC
3361 GGCGGCTGCA TACGCTTGAT CCGGCTACCT GCCCATTCGA CCACCAAGCG AAACATCGCA
3421 TCGAGCGAGC ACGTACTCGG ATGGAAGCCG GTCTTGTCGA TCAGGATGAT CTGGACGAAG
3481 AGCATCAGGG GCTCGCGCCA GCCGAACTGT TCGCCAGGCT CAAGGCGCGC ATGCCCGACG
3541 GCGAGGATCT CGTCGTGACC CATGGCGATG CCTGCTTGCC GAATATCATG GTGGAAAATG
3601 GCCGCTTTTC TGGATTCATC GACTGTGGCC GGCTGGGTGT GGCGGACCGC TATCAGGACA
3661 TAGCGTTGGC TACCCGTGAT ATTGCTGAAG AGCTTGGCGG CGAATGGGCT GACCGCTTCC
3721 TCGTGCTTTA CGGTATCGCC GCTCCCGATT CGCAGCGCAT CGCCTTCTAT CGCCTTCTTG
3781 ACGAGTTCTT CTGAGCGGGA CTCTGGGGTT CGAAATGACC GACCAAGCGA CGCCCAACCT
3841 GCCATCACGA GATTTCGATT CCACCGCCGC CTTCTATGAA AGGTTGGGCT TCGGAATCGT
3901 TTTCCGGGAC GCCGGCTGGA TGATCCTCCA GCGCGGGGAT CTCATGCTGG AGTTCTTCGC
3961 CCACCCCAAC TTGTTTATTG CAGCTTATAA TGGTTACAAA TAAAGCAATA GCATCACAAA
4021 TTTCACAAAT AAAGCATTTT TTTCACTGCA TTCTAGTTGT GGTTTGTCCA AACTCATCAA
4081 TGTATCTTAT CATGTCTGTA TACCGTCGAC CTCTAGCTAG AGCTTGGCGT AATCATGGTC
4141 ATAGCTGTTT CCTGTGTGAA ATTGTTATCC GCTCACAATT CCACACAACA TACGAGCCGG
4201 AAGCATAAAG TGTAAAGCCT GGGGTGCCTA ATGAGTGAGC TAACTCACAT TAATTGCGTT
4261 GCGCTCACTG CCCGCTTTCC AGTCGGGAAA CCTGTCGTGC CAGCTGCATT AATGAATCGG
4321 CCAACGCGCG GGGAGAGGCG GTTTGCGTAT TGGGCGCTCT TCCGCTTCCT CGCTCACTGA
4381 CTCGCTGCGC TCGGTCGTTC GGCTGCGGCG AGCGGTATCA GCTCACTCAA AGGCGGTAAT
4441 ACGGTTATCC ACAGAATCAG GGGATAACGC AGGAAAGAAC ATGTGAGCAA AAGGCCAGCA
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Figure 26M

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4501 AAAGGCCAGG AACCGTAAAA AGGCCGCGTT GCTGGCGTTT TTCCATAGGC TCCGCCCCCC
4561 TGACGAGCAT CACAAAAATC GACGCTCAAG TCAGAGGTGG CGAAACCCGA CAGGACTATA
4621 AAGATACCAG GCGTTTCCCC CTGGAAGCTC CCTCGTGCGC TCTCCTGTTC CGACCCTGCC
4681 GCTTACCGGA TACCTGTCCG CCTTTCTCCC TTCGGGAAGC GTGGCGCTTT CTCAATGCTC
4741 ACGCTGTAGG TATCTCAGTT CGGTGTAGGT CGTTCGCTCC AAGCTGGGCT GTGTGCACGA
4801 ACCCCCCGTT CAGCCCGACC GCTGCGCCTT ATCCGGTAAC TATCGTCTTG AGTCCAACCC
4861 GGTAAGACAC GACTTATCGC CACTGGCAGC AGCCACTGGT AACAGGATTA GCAGAGCGAG
4921 GTATGTAGGC GGTGCTACAG AGTTCTTGAA GTGGTGGCCT AACTACGGCT ACACTAGAAG
4981 GACAGTATTT GGTATCTGCG CTCTGCTGAA GCCAGTTACC TTCGGAAAAA GAGTTGGTAG
5041 CTCTTGATCC GGCAAACAAA CCACCGCTGG TAGCGGTGGT TTTTTTGTTT GCAAGCAGCA
5101 GATTACGCGC AGAAAAAAAG GATCTCAAGA AGATCCTTTG ATCTTTTCTA CGGGGTCTGA
5161 CGCTCAGTGG AACGAAAACT CACGTTAAGG GATTTTGGTC ATGAGATTAT CAAAAAGGAT
5221 CTTCACCTAG ATCCTTTTAA ATTAAAAATG AAGTTTTAAA TCAATCTAAA GTATATATGA
5281 GTAAACTTGG TCTGACAGTT ACCAATGCTT AATCAGTGAG GCACCTATCT CAGCGATCTG
5341 TCTATTTCGT TCATCCATAG TTGCCTGACT CCCCGTCGTG TAGATAACTA CGATACGGGA
5401 GGGCTTACCA TCTGGCCCCA GTGCTGCAAT GATACCGCGA GACCCACGCT CACCGGCTCC
5461 AGATTTATCA GCAATAAACC AGCCAGCCGG AAGGGCCGAG CGCAGAAGTG GTCCTGCAAC
5521 TTTATCCGCC TCCATCCAGT CTATTAATTG TTGCCGGGAA GCTAGAGTAA GTAGTTCGCC
5581 AGTTAATAGT TTGCGCAACG TTGTTGCCAT TGCTACAGGC ATCGTGGTGT CACGCTCGTC
5641 GTTTGGTATG GCTTCATTCA GCTCCGGTTC CCAACGATCA AGGCGAGTTA CATGATCCCC
5701 CATGTTGTGC AAAAAAGCGG TTAGCTCCTT CGGTCCTCCG ATCGTTGTCA GAAGTAAGTT
5761 GGCCGCAGTG TTATCACTCA TGGTTATGGC AGCACTGCAT AATTCTCTTA CTGTCATGCC
5821 ATCCGTAAGA TGCTTTTCTG TGACTGGTGA GTACTCAACC AAGTCATTCT GAGAATAGTG
5881 TATGCGGCGA CCGAGTTGCT CTTGCCCGGC GTCAATACGG GATAATACCG CGCCACATAG
5941 CAGAACTTTA AAAGTGCTCA TCATTGGAAA ACGTTCTTCG GGGCGAAAAC TCTCAAGGAT
6001 CTTACCGCTG TTGAGATCCA GTTCGATGTA ACCCACTCGT GCACCCAACT GATCTTCAGC
6061 ATCTTTTACT TTCACCAGCG TTTCTGGGTG AGCAAAAACA GGAAGGCAAA ATGCCGCAAA
6121 AAAGGGAATA AGGGCGACAC GGAAATGTTG AATACTCATA CTCTTCCTTT TTCAATATTA
6181 TTGAAGCATT TATCAGGGTT ATTGTCTCAT GAGCGGATAC ATATTTGAAT GTATTTAGAA
6241 AAATAAACAA ATAGGGGTTC CGCGCACATT TCCCCGAAAA GTGCCACCTG ACGTC
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Figure 26N

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LOCUS        pSBS5186-N   6319 bp    DNA    CIRCULAR SYN
DEFINITION   Ligation of 5186 into NVF (KpnI, BamHI)
ACCESSION    pSBS5186-N
REFERENCE    1  (bases 1 to 6319)
FEATURES              Location/Qualifiers
     CDS              956..1003
                      /gene="NLS"
                      /product="Nuclear Localization Signal"
     CDS              1004..1597
                      /gene="ZFP"
                      /product="LSR 8A-7B"
     CDS              1598..1840
                      /gene="VP16"
                      /product="VP16 activation domain"
     CDS              1841..1867
                      /gene="FLAG"
                      /product="FLAG epitope"
     CDS              3064..3947
                      /gene="Neo"
                      /product="neomycin resistance"
     CDS              complement (5321..6181)
                      /gene="Amp "
                      /product="Ampcillin resistance"
BASE COUNT     1449 a   1687 c   1651 g   1532 t
ORIGIN
        1 GACGGATCGG GAGATCTCCC GATCCCCTAT GGTCGACTCT CAGTACAATC TGCTCTGATG
       61 CCGCATAGTT AAGCCAGTAT CTGCTCCCTG CTTGTGTGTT GGAGGTCGCT GAGTAGTGCG
      121 CGAGCAAAAT TTAAGCTACA ACAAGGCAAG GCTTGACCGA CAATTGCATG AAGAATCTGC
      181 TTAGGGTTAG GCGTTTTGCG CTGCTTCGCG ATGTACGGGC CAGATATACG CGTTGACATT
      241 GATTATTGAC TAGTTATTAA TAGTAATCAA TTACGGGGTC ATTAGTTCAT AGCCCATATA
      301 TGGAGTTCCG CGTTACATAA CTTACGGTAA ATGGCCCGCC TGGCTGACCG CCCAACGACC
      361 CCCGCCCATT GACGTCAATA ATGACGTATG TTCCCATAGT AACGCCAATA GGGACTTTCC
      421 ATTGACGTCA ATGGGTGGAC TATTTACGGT AAACTGCCCA CTTGGCAGTA CATCAAGTGT
      481 ATCATATGCC AAGTACGCCC CCTATTGACG TCAATGACGG TAAATGGCCC GCCTGGCATT
      541 ATGCCCAGTA CATGACCTTA TGGGACTTTC CTACTTGGCA GTACATCTAC GTATTAGTCA
      601 TCGCTATTAC CATGGTGATG CGGTTTTGGC AGTACATCAA TGGGCGTGGA TAGCGGTTTG
      661 ACTCACGGGG ATTTCCAAGT CTCCACCCCA TTGACGTCAA TGGGAGTTTG TTTTGGCACC
      721 AAAATCAACG GGACTTTCCA AAATGTCGTA ACAACTCCGC CCCATTGACG CAAATGGGCG
      781 GTAGGCGTGT ACGGTGGGAG GTCTATATAA GCAGAGCTCT CTGGCTAACT AGAGAACCCA
      841 CTGCTTACTG GCTTATCGAA ATTAATACGA CTCACTATAG GGAGACCCAA GCTGGCTAGC
      901 GTTTAAACTT AAGCTGATCC ACTAGTCCAG TGTGGTGGAA TTCGCTAGCG CCACCATGGC
      961 CCCCAAGAAG AAGAGGAAGG TGGGAATCCA TGGGGTACCG GGCAAGAAGA AGCAGCACAT
     1021 CTGCCACATC CAGGGCTGTG GTAAAGTTTA CGGCCAGTCC GGCGCCCTGA CCCGCCACCT
     1081 GCGCTGGCAC ACCGGCGAGA GGCCTTTCAT GTGTACATGG TCCTACTGTG GTAAACGCTT
     1141 CACCCGCTCC GACCACCTGA CCCGCCACAA GCGTACCCAC ACCGGTGAGA AGAAATTTGC
     1201 TTGTCCGGAA TGTCCGAAGC GCTTCATGCG CTCCGACAAC CTGCGCGAGC ACAACAAGAC
     1261 CCACCAGAAC AAGAAGGGTG GATCTGGTGA TGGTGGCCGT CGCGGTGGCG GTTCTGGCAA
     1321 GAAGAAGCAG CACATCTGCC ACATCCAGGG CTGTGGTAAA GTTTACGGCC GCTCCTCCGC
```

Figure 26O

1381 CCTGACCCGC CACCTGCGCT GGCACACCGG CGAGAGGCCT TTCATGTGTA CATGGTCCTA
1441 CTGTGGTAAA CGCTTCACCC AGCGCGCCCA CCTGGAGCGC CACAAGCGTA CCCACACCGG
1501 TGAGAAGAAA TTTGCTTGTC CGGAATGTCC GAAGCGCTTC ATGCGCTCCG ACACCCTGCG
1561 CGAGCACATC AAGACCCACC AGAACAAGAA GGGTGGATCC GCCCCCCCGA CCGATGTCAG
1621 CCTGGGGGAC GAGCTCCACT TAGACGGCGA GGACGTGGCG ATGGCGCATG CCGACGCGCT
1681 AGACGATTTC GATCTGGACA TGTTGGGGGA CGGGGATTCC CCGGGGCCGG GATTTACCCC
1741 CCACGACTCC GCCCCCTACG GCGCTCTGGA TATGGCCGGC TTCGAGTTTG AGCAGATGTT
1801 TACCGATGCC CTTGGAATTG ACGAGTACGG TGGGGGCAGC GACTACAAGG ACGACGATGA
1861 CAAGTAAGCT TCTCGAGTCT AGAGGGCCCG TTTAAACCCG CTGATCAGCC TCGACTGTGC
1921 CTTCTAGTTG CCAGCCATCT GTTGTTTGCC CCTCCCCCGT GCCTTCCTTG ACCCTGGAAG
1981 GTGCCACTCC CACTGTCCTT TCCTAATAAA ATGAGGAAAT TGCATCGCAT TGTCTGAGTA
2041 GGTGTCATTC TATTCTGGGG GGTGGGGTGG GGCAGGACAG CAAGGGGGAG GATTGGGAAG
2101 ACAATAGCAG GCATGCTGGG GATGCGGTGG GCTCTATGGC TTCTGAGGCG GAAAGAACCA
2161 GCTGGGGCTC TAGGGGGTAT CCCCACGCGC CCTGTAGCGG CGCATTAAGC GCGGCGGGTG
2221 TGGTGGTTAC GCGCAGCGTG ACCGCTACAC TTGCCAGCGC CCTAGCGCCC GCTCCTTTCG
2281 CTTTCTTCCC TTCCTTTCTC GCCACGTTCG CCGGCTTTCC CCGTCAAGCT CTAAATCGGG
2341 GCATCCCTTT AGGGTTCCGA TTTAGTGCTT TACGGCACCT CGACCCCAAA AAACTTGATT
2401 AGGGTGATGG TTCACGTAGT GGGCCATCGC CCTGATAGAC GGTTTTTCGC CCTTTGACGT
2461 TGGAGTCCAC GTTCTTTAAT AGTGGACTCT TGTTCCAAAC TGGAACAACA CTCAACCCTA
2521 TCTCGGTCTA TTCTTTTGAT TTATAAGGGA TTTTGGGGAT TTCGGCCTAT TGGTTAAAAA
2581 ATGAGCTGAT TTAACAAAAA TTTAACGCGA ATTAATTCTG TGGAATGTGT GTCAGTTAGG
2641 GTGTGGAAAG TCCCCAGGCT CCCCAGGCAG GCAGAAGTAT GCAAAGCATG CATCTCAATT
2701 AGTCAGCAAC CAGGTGTGGA AAGTCCCCAG GCTCCCCAGC AGGCAGAAGT ATGCAAAGCA
2761 TGCATCTCAA TTAGTCAGCA ACCATAGTCC CGCCCCTAAC TCCGCCCATC CCGCCCCTAA
2821 CTCCGCCCAG TTCCGCCCAT TCTCCGCCCC ATGGCTGACT AATTTTTTTT ATTTATGCAG
2881 AGGCCGAGGC CGCCTCTGCC TCTGAGCTAT TCCAGAAGTA GTGAGGAGGC TTTTTTGGAG
2941 GCCTAGGCTT TTGCAAAAAG CTCCCGGGAG CTTGTATATC CATTTTCGGA TCTGATCAAG
3001 AGACAGGATG AGGATCGTTT CGCATGATTG AACAAGATGG ATTGCACGCA GGTTCTCCGG
3061 CCGCTTGGGT GGAGAGGCTA TTCGGCTATG ACTGGGCACA ACAGACAATC GGCTGCTCTG
3121 ATGCCGCCGT GTTCCGGCTG TCAGCGCAGG GGCGCCCGGT TCTTTTTGTC AAGACCGACC
3181 TGTCCGGTGC CCTGAATGAA CTGCAGGACG AGGCAGCGCG GCTATCGTGG CTGGCCACGA
3241 CGGGCGTTCC TTGCGCAGCT GTGCTCGACG TTGTCACTGA AGCGGGAAGG GACTGGCTGC
3301 TATTGGGCGA AGTGCCGGGG CAGGATCTCC TGTCATCTCA CCTTGCTCCT GCCGAGAAAG
3361 TATCCATCAT GGCTGATGCA ATGCGGCGGC TGCATACGCT TGATCCGGCT ACCTGCCCAT
3421 TCGACCACCA AGCGAAACAT CGCATCGAGC GAGCACGTAC TCGGATGGAA GCCGGTCTTG
3481 TCGATCAGGA TGATCTGGAC GAAGAGCATC AGGGGCTCGC GCCAGCCGAA CTGTTCGCCA
3541 GGCTCAAGGC GCGCATGCCC GACGGCGAGG ATCTCGTCGT GACCCATGGC GATGCCTGCT
3601 TGCCGAATAT CATGGTGGAA AATGGCCGCT TTTCTGGATT CATCGACTGT GGCCGGCTGG
3661 GTGTGGCGGA CCGCTATCAG GACATAGCGT TGGCTACCCG TGATATTGCT GAAGAGCTTG
3721 GCGGCGAATG GGCTGACCGC TTCCTCGTGC TTTACGGTAT CGCCGCTCCC GATTCGCAGC
3781 GCATCGCCTT CTATCGCCTT CTTGACGAGT TCTTCTGAGC GGGACTCTGG GGTTCGAAAT
3841 GACCGACCAA GCGACGCCCA ACCTGCCATC ACGAGATTTC GATTCCACCG CCGCCTTCTA
3901 TGAAAGGTTG GGCTTCGGAA TCGTTTTCCG GGACGCCGGC TGGATGATCC TCCAGCGCGG
3961 GGATCTCATG CTGGAGTTCT TCGCCCACCC CAACTTGTTT ATTGCAGCTT ATAATGGTTA
4021 CAAATAAAGC AATAGCATCA CAAATTTCAC AAATAAAGCA TTTTTTTCAC TGCATTCTAG
4081 TTGTGGTTTG TCCAAACTCA TCAATGTATC TTATCATGTC TGTATACCGT CGACCTCTAG
4141 CTAGAGCTTG GCGTAATCAT GGTCATAGCT GTTTCCTGTG TGAAATTGTT ATCCGCTCAC
4201 AATTCCACAC AACATACGAG CCGGAAGCAT AAAGTGTAAA GCCTGGGGTG CCTAATGAGT
4261 GAGCTAACTC ACATTAATTG CGTTGCGCTC ACTGCCCGCT TTCCAGTCGG GAAACCTGTC
4321 GTGCCAGCTG CATTAATGAA TCGGCCAACG CGCGGGGAGA GGCGGTTTGC GTATTGGGCG

Figure 26P

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4381 CTCTTCCGCT TCCTCGCTCA CTGACTCGCT GCGCTCGGTC GTTCGGCTGC GGCGAGCGGT
4441 ATCAGCTCAC TCAAAGGCGG TAATACGGTT ATCCACAGAA TCAGGGGATA ACGCAGGAAA
4501 GAACATGTGA GCAAAAGGCC AGCAAAAGGC CAGGAACCGT AAAAAGGCCG CGTTGCTGGC
4561 GTTTTTCCAT AGGCTCCGCC CCCCTGACGA GCATCACAAA AATCGACGCT CAAGTCAGAG
4621 GTGGCGAAAC CCGACAGGAC TATAAAGATA CCAGGCGTTT CCCCCTGGAA GCTCCCTCGT
4681 GCGCTCTCCT GTTCCGACCC TGCCGCTTAC CGGATACCTG TCCGCCTTTC TCCCTTCGGG
4741 AAGCGTGGCG CTTTCTCAAT GCTCACGCTG TAGGTATCTC AGTTCGGTGT AGGTCGTTCG
4801 CTCCAAGCTG GGCTGTGTGC ACGAACCCCC CGTTCAGCCC GACCGCTGCG CCTTATCCGG
4861 TAACTATCGT CTTGAGTCCA ACCCGGTAAG ACACGACTTA TCGCCACTGG CAGCAGCCAC
4921 TGGTAACAGG ATTAGCAGAG CGAGGTATGT AGGCGGTGCT ACAGAGTTCT TGAAGTGGTG
4981 GCCTAACTAC GGCTACACTA GAAGGACAGT ATTTGGTATC TGCGCTCTGC TGAAGCCAGT
5041 TACCTTCGGA AAAAGAGTTG GTAGCTCTTG ATCCGGCAAA CAAACCACCG CTGGTAGCGG
5101 TGGTTTTTTT GTTTGCAAGC AGCAGATTAC GCGCAGAAAA AAAGGATCTC AAGAAGATCC
5161 TTTGATCTTT TCTACGGGGT CTGACGCTCA GTGGAACGAA AACTCACGTT AAGGGATTTT
5221 GGTCATGAGA TTATCAAAAA GGATCTTCAC CTAGATCCTT TTAAATTAAA AATGAAGTTT
5281 TAAATCAATC TAAAGTATAT ATGAGTAAAC TTGGTCTGAC AGTTACCAAT GCTTAATCAG
5341 TGAGGCACCT ATCTCAGCGA TCTGTCTATT TCGTTCATCC ATAGTTGCCT GACTCCCCGT
5401 CGTGTAGATA ACTACGATAC GGGAGGGCTT ACCATCTGGC CCCAGTGCTG CAATGATACC
5461 GCGAGACCCA CGCTCACCGG CTCCAGATTT ATCAGCAATA AACCAGCCAG CCGGAAGGGC
5521 CGAGCGCAGA AGTGGTCCTG CAACTTTATC CGCCTCCATC CAGTCTATTA ATTGTTGCCG
5581 GGAAGCTAGA GTAAGTAGTT CGCCAGTTAA TAGTTTGCGC AACGTTGTTG CCATTGCTAC
5641 AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA TTCAGCTCCG GTTCCCAACG
5701 ATCAAGGCGA GTTACATGAT CCCCCATGTT GTGCAAAAAA GCGGTTAGCT CCTTCGGTCC
5761 TCCGATCGTT GTCAGAAGTA AGTTGGCCGC AGTGTTATCA CTCATGGTTA TGGCAGCACT
5821 GCATAATTCT CTTACTGTCA TGCCATCCGT AAGATGCTTT TCTGTGACTG GTGAGTACTC
5881 AACCAAGTCA TTCTGAGAAT AGTGTATGCG GCGACCGAGT TGCTCTTGCC CGGCGTCAAT
5941 ACGGGATAAT ACCGCGCCAC ATAGCAGAAC TTTAAAAGTG CTCATCATTG GAAAACGTTC
6001 TTCGGGGCGA AAACTCTCAA GGATCTTACC GCTGTTGAGA TCCAGTTCGA TGTAACCCAC
6061 TCGTGCACCC AACTGATCTT CAGCATCTTT TACTTTCACC AGCGTTTCTG GGTGAGCAAA
6121 AACAGGAAGG CAAAATGCCG CAAAAAAGGG AATAAGGGCG ACACGGAAAT GTTGAATACT
6181 CATACTCTTC CTTTTTCAAT ATTATTGAAG CATTTATCAG GGTTATTGTC TCATGAGCGG
6241 ATACATATTT GAATGTATTT AGAAAAATAA ACAAATAGGG GTTCCGCGCA CATTTCCCCG
6301 AAAAGTGCCA CCTGACGTC
//
```


Figure 26Q

```
LOCUS       pSBS5205-N   6295 bp    DNA   CIRCULAR SYN
DEFINITION  Ligation of 5205 into NVF (KpnI, BamHI)
ACCESSION   pSBS5205-N
REFERENCE   1  (bases 1 to 6295)
FEATURES             Location/Qualifiers
     CDS             956..1003
                     /gene="NLS"
                     /product="Nuclear Localization Signal"
     CDS             1004..1573
                     /gene="ZFP"
                     /product="LSR 1A-7B"
     CDS             1574..1816
                     /gene="VP16"
                     /product="VP16 activation domain"
     CDS             1817..1843
                     /gene="FLAG"
                     /product="FLAG epitope"
     CDS             3040..3923
                     /gene="Neo"
                     /product="neomycin resistance"
     CDS             complement (5297..6157)
                     /gene="Amp "
                     /product="Ampcillin resistance"
BASE COUNT     1448 a   1677 c   1643 g   1527 t
ORIGIN
        1 GACGGATCGG GAGATCTCCC GATCCCCTAT GGTCGACTCT CAGTACAATC TGCTCTGATG
       61 CCGCATAGTT AAGCCAGTAT CTGCTCCCTG CTTGTGTGTT GGAGGTCGCT GAGTAGTGCG
      121 CGAGCAAAAT TTAAGCTACA ACAAGGCAAG GCTTGACCGA CAATTGCATG AAGAATCTGC
      181 TTAGGGTTAG GCGTTTTGCG CTGCTTCGCG ATGTACGGGC CAGATATACG CGTTGACATT
      241 GATTATTGAC TAGTTATTAA TAGTAATCAA TTACGGGGTC ATTAGTTCAT AGCCCATATA
      301 TGGAGTTCCG CGTTACATAA CTTACGGTAA ATGGCCCGCC TGGCTGACCG CCCAACGACC
      361 CCCGCCCATT GACGTCAATA ATGACGTATG TTCCCATAGT AACGCCAATA GGGACTTTCC
      421 ATTGACGTCA ATGGGTGGAC TATTTACGGT AAACTGCCCA CTTGGCAGTA CATCAAGTGT
      481 ATCATATGCC AAGTACGCCC CCTATTGACG TCAATGACGG TAAATGGCCC GCCTGGCATT
      541 ATGCCCAGTA CATGACCTTA TGGGACTTTC CTACTTGGCA GTACATCTAC GTATTAGTCA
      601 TCGCTATTAC CATGGTGATG CGGTTTTGGC AGTACATCAA TGGGCGTGGA TAGCGGTTTG
      661 ACTCACGGGG ATTTCCAAGT CTCCACCCCA TTGACGTCAA TGGGAGTTTG TTTTGGCACC
      721 AAAATCAACG GGACTTTCCA AAATGTCGTA ACAACTCCGC CCCATTGACG CAAATGGGCG
      781 GTAGGCGTGT ACGGTGGGAG GTCTATATAA GCAGAGCTCT CTGGCTAACT AGAGAACCCA
      841 CTGCTTACTG GCTTATCGAA ATTAATACGA CTCACTATAG GGAGACCCAA GCTGGCTAGC
      901 GTTTAAACTT AAGCTGATCC ACTAGTCCAG TGTGGTGGAA TTCGCTAGCG CCACCATGGC
      961 CCCCAAGAAG AAGAGGAAGG TGGGAATCCA TGGGGTACCG GGCAAGAAGA AGCAGCACAT
     1021 CTGCCACATC CAGGGCTGTG GTAAAGTTTA CGGCGAGCGC GGCGACCTGA CCCGCCACCT
     1081 GCGCTGGCAC ACCGGCGAGA GGCCTTTCAT GTGTACATGG TCCTACTGTG GTAAACGCTT
     1141 CACCGACCCG GGCGCCCTGG TGCGCCACAA GCGTACCCAC ACCGGTGAGA AGAAATTTGC
     1201 TTGTCCGGAA TGTCCGAAGC GCTTCATGCG CTCCGACAAC CTGACCCAGC ACATCAAGAC
     1261 CCACCAGAAC AAGAAGGGTG GATCTGGTGA TGGCAAGAAG AAGCAGCACA TCTGCCACAT
     1321 CCAGGGCTGT GGTAAAGTTT ACGGCCAGTC CGGCACCCTG ACCCGCCACC TGCGCTGGCA
```

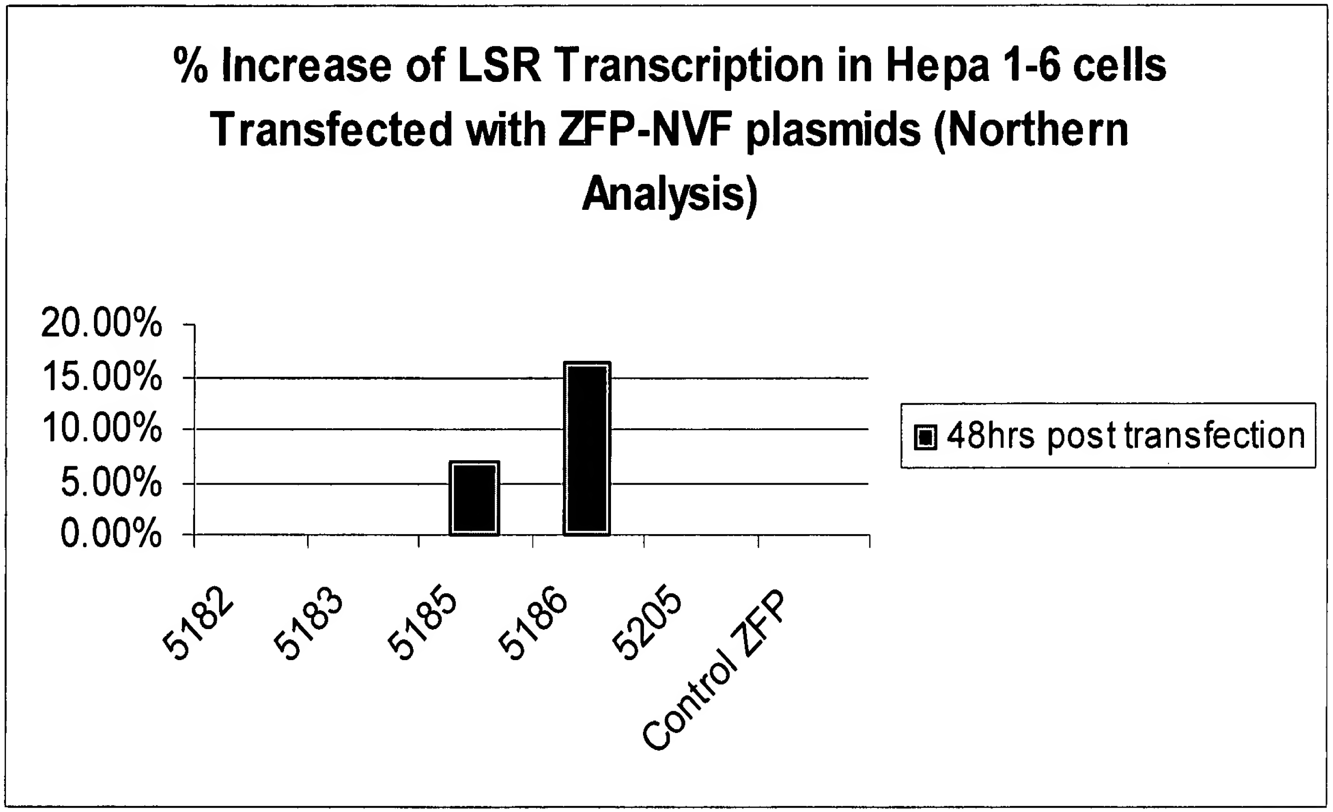
Figure 26R

```
1381 CACCGGCGAG AGGCCTTTCA TGTGTACATG GTCCTACTGT GGTAAACGCT TCACCCAGTC
1441 CTCCGACCTG CAGCGCCACA AGCGTACCCA CACCGGTGAG AAGAAATTTG CTTGTCCGGA
1501 ATGTCCGAAG CGCTTCATGC GCTCCGACGC CCTGGCCCGC CACATCAAGA CCCACCAGAA
1561 CAAGAAGGGT GGATCCGCCC CCCCGACCGA TGTCAGCCTG GGGGACGAGC TCCACTTAGA
1621 CGGCGAGGAC GTGGCGATGG CGCATGCCGA CGCGCTAGAC GATTTCGATC TGGACATGTT
1681 GGGGGACGGG GATTCCCCGG GGCCGGGATT TACCCCCCAC GACTCCGCCC CCTACGGCGC
1741 TCTGGATATG GCCGGCTTCG AGTTTGAGCA GATGTTTACC GATGCCCTTG GAATTGACGA
1801 GTACGGTGGG GGCAGCGACT ACAAGGACGA CGATGACAAG TAAGCTTCTC GAGTCTAGAG
1861 GGCCCGTTTA AACCCGCTGA TCAGCCTCGA CTGTGCCTTC TAGTTGCCAG CCATCTGTTG
1921 TTTGCCCCTC CCCCGTGCCT TCCTTGACCC TGGAAGGTGC CACTCCCACT GTCCTTTCCT
1981 AATAAAATGA GGAAATTGCA TCGCATTGTC TGAGTAGGTG TCATTCTATT CTGGGGGGTG
2041 GGGTGGGGCA GGACAGCAAG GGGGAGGATT GGGAAGACAA TAGCAGGCAT GCTGGGGATG
2101 CGGTGGGCTC TATGGCTTCT GAGGCGGAAA GAACCAGCTG GGGCTCTAGG GGGTATCCCC
2161 ACGCGCCCTG TAGCGGCGCA TTAAGCGCGG CGGGTGTGGT GGTTACGCGC AGCGTGACCG
2221 CTACACTTGC CAGCGCCCTA GCGCCCGCTC CTTTCGCTTT CTTCCCTTCC TTTCTCGCCA
2281 CGTTCGCCGG CTTTCCCCGT CAAGCTCTAA ATCGGGGCAT CCCTTTAGGG TTCCGATTTA
2341 GTGCTTTACG GCACCTCGAC CCCAAAAAAC TTGATTAGGG TGATGGTTCA CGTAGTGGGC
2401 CATCGCCCTG ATAGACGGTT TTTCGCCCTT TGACGTTGGA GTCCACGTTC TTTAATAGTG
2461 GACTCTTGTT CCAAACTGGA ACAACACTCA ACCCTATCTC GGTCTATTCT TTTGATTTAT
2521 AAGGGATTTT GGGGATTTCG GCCTATTGGT TAAAAAATGA GCTGATTTAA CAAAAATTTA
2581 ACGCGAATTA ATTCTGTGGA ATGTGTGTCA GTTAGGGTGT GGAAAGTCCC CAGGCTCCCC
2641 AGGCAGGCAG AAGTATGCAA AGCATGCATC TCAATTAGTC AGCAACCAGG TGTGGAAAGT
2701 CCCCAGGCTC CCCAGCAGGC AGAAGTATGC AAAGCATGCA TCTCAATTAG TCAGCAACCA
2761 TAGTCCCGCC CCTAACTCCG CCCATCCCGC CCCTAACTCC GCCCAGTTCC GCCCATTCTC
2821 CGCCCCATGG CTGACTAATT TTTTTTATTT ATGCAGAGGC CGAGGCCGCC TCTGCCTCTG
2881 AGCTATTCCA GAAGTAGTGA GGAGGCTTTT TTGGAGGCCT AGGCTTTTGC AAAAAGCTCC
2941 CGGGAGCTTG TATATCCATT TTCGGATCTG ATCAAGAGAC AGGATGAGGA TCGTTTCGCA
3001 TGATTGAACA AGATGGATTG CACGCAGGTT CTCCGGCCGC TTGGGTGGAG AGGCTATTCG
3061 GCTATGACTG GGCACAACAG ACAATCGGCT GCTCTGATGC CGCCGTGTTC CGGCTGTCAG
3121 CGCAGGGGCG CCCGGTTCTT TTTGTCAAGA CCGACCTGTC CGGTGCCCTG AATGAACTGC
3181 AGGACGAGGC AGCGCGGCTA TCGTGGCTGG CCACGACGGG CGTTCCTTGC GCAGCTGTGC
3241 TCGACGTTGT CACTGAAGCG GGAAGGGACT GGCTGCTATT GGGCGAAGTG CCGGGGCAGG
3301 ATCTCCTGTC ATCTCACCTT GCTCCTGCCG AGAAAGTATC CATCATGGCT GATGCAATGC
3361 GGCGGCTGCA TACGCTTGAT CCGGCTACCT GCCCATTCGA CCACCAAGCG AAACATCGCA
3421 TCGAGCGAGC ACGTACTCGG ATGGAAGCCG GTCTTGTCGA TCAGGATGAT CTGGACGAAG
3481 AGCATCAGGG GCTCGCGCCA GCCGAACTGT TCGCCAGGCT CAAGGCGCGC ATGCCCGACG
3541 GCGAGGATCT CGTCGTGACC CATGGCGATG CCTGCTTGCC GAATATCATG GTGGAAAATG
3601 GCCGCTTTTC TGGATTCATC GACTGTGGCC GGCTGGGTGT GGCGGACCGC TATCAGGACA
3661 TAGCGTTGGC TACCCGTGAT ATTGCTGAAG AGCTTGGCGG CGAATGGGCT GACCGCTTCC
3721 TCGTGCTTTA CGGTATCGCC GCTCCCGATT CGCAGCGCAT CGCCTTCTAT CGCCTTCTTG
3781 ACGAGTTCTT CTGAGCGGGA CTCTGGGGTT CGAAATGACC GACCAAGCGA CGCCCAACCT
3841 GCCATCACGA GATTTCGATT CCACCGCCGC CTTCTATGAA AGGTTGGGCT TCGGAATCGT
3901 TTTCCGGGAC GCCGGCTGGA TGATCCTCCA GCGCGGGGAT CTCATGCTGG AGTTCTTCGC
3961 CCACCCCAAC TTGTTTATTG CAGCTTATAA TGGTTACAAA TAAAGCAATA GCATCACAAA
4021 TTTCACAAAT AAAGCATTTT TTTCACTGCA TTCTAGTTGT GGTTTGTCCA AACTCATCAA
4081 TGTATCTTAT CATGTCTGTA TACCGTCGAC CTCTAGCTAG AGCTTGGCGT AATCATGGTC
4141 ATAGCTGTTT CCTGTGTGAA ATTGTTATCC GCTCACAATT CCACACAACA TACGAGCCGG
4201 AAGCATAAAG TGTAAAGCCT GGGGTGCCTA ATGAGTGAGC TAACTCACAT TAATTGCGTT
4261 GCGCTCACTG CCCGCTTTCC AGTCGGGAAA CCTGTCGTGC CAGCTGCATT AATGAATCGG
4321 CCAACGCGCG GGGAGAGGCG GTTTGCGTAT TGGGCGCTCT TCCGCTTCCT CGCTCACTGA
```

Figure 26S

```
4381 CTCGCTGCGC TCGGTCGTTC GGCTGCGGCG AGCGGTATCA GCTCACTCAA AGGCGGTAAT
4441 ACGGTTATCC ACAGAATCAG GGGATAACGC AGGAAAGAAC ATGTGAGCAA AAGGCCAGCA
4501 AAAGGCCAGG AACCGTAAAA AGGCCGCGTT GCTGGCGTTT TTCCATAGGC TCCGCCCCCC
4561 TGACGAGCAT CACAAAAATC GACGCTCAAG TCAGAGGTGG CGAAACCCGA CAGGACTATA
4621 AAGATACCAG GCGTTTCCCC CTGGAAGCTC CCTCGTGCGC TCTCCTGTTC CGACCCTGCC
4681 GCTTACCGGA TACCTGTCCG CCTTTCTCCC TTCGGGAAGC GTGGCGCTTT CTCAATGCTC
4741 ACGCTGTAGG TATCTCAGTT CGGTGTAGGT CGTTCGCTCC AAGCTGGGCT GTGTGCACGA
4801 ACCCCCCGTT CAGCCCGACC GCTGCGCCTT ATCCGGTAAC TATCGTCTTG AGTCCAACCC
4861 GGTAAGACAC GACTTATCGC CACTGGCAGC AGCCACTGGT AACAGGATTA GCAGAGCGAG
4921 GTATGTAGGC GGTGCTACAG AGTTCTTGAA GTGGTGGCCT AACTACGGCT ACACTAGAAG
4981 GACAGTATTT GGTATCTGCG CTCTGCTGAA GCCAGTTACC TTCGGAAAAA GAGTTGGTAG
5041 CTCTTGATCC GGCAAACAAA CCACCGCTGG TAGCGGTGGT TTTTTTGTTT GCAAGCAGCA
5101 GATTACGCGC AGAAAAAAAG GATCTCAAGA AGATCCTTTG ATCTTTTCTA CGGGGTCTGA
5161 CGCTCAGTGG AACGAAAACT CACGTTAAGG GATTTTGGTC ATGAGATTAT CAAAAAGGAT
5221 CTTCACCTAG ATCCTTTTAA ATTAAAAATG AAGTTTTAAA TCAATCTAAA GTATATATGA
5281 GTAAACTTGG TCTGACAGTT ACCAATGCTT AATCAGTGAG GCACCTATCT CAGCGATCTG
5341 TCTATTTCGT TCATCCATAG TTGCCTGACT CCCCGTCGTG TAGATAACTA CGATACGGGA
5401 GGGCTTACCA TCTGGCCCCA GTGCTGCAAT GATACCGCGA GACCCACGCT CACCGGCTCC
5461 AGATTTATCA GCAATAAACC AGCCAGCCGG AAGGGCCGAG CGCAGAAGTG GTCCTGCAAC
5521 TTTATCCGCC TCCATCCAGT CTATTAATTG TTGCCGGGAA GCTAGAGTAA GTAGTTCGCC
5581 AGTTAATAGT TTGCGCAACG TTGTTGCCAT TGCTACAGGC ATCGTGGTGT CACGCTCGTC
5641 GTTTGGTATG GCTTCATTCA GCTCCGGTTC CCAACGATCA AGGCGAGTTA CATGATCCCC
5701 CATGTTGTGC AAAAAAGCGG TTAGCTCCTT CGGTCCTCCG ATCGTTGTCA GAAGTAAGTT
5761 GGCCGCAGTG TTATCACTCA TGGTTATGGC AGCACTGCAT AATTCTCTTA CTGTCATGCC
5821 ATCCGTAAGA TGCTTTTCTG TGACTGGTGA GTACTCAACC AAGTCATTCT GAGAATAGTG
5881 TATGCGGCGA CCGAGTTGCT CTTGCCCGGC GTCAATACGG GATAATACCG CGCCACATAG
5941 CAGAACTTTA AAAGTGCTCA TCATTGGAAA ACGTTCTTCG GGGCGAAAAC TCTCAAGGAT
6001 CTTACCGCTG TTGAGATCCA GTTCGATGTA ACCCACTCGT GCACCCAACT GATCTTCAGC
6061 ATCTTTTACT TTCACCAGCG TTTCTGGGTG AGCAAAAACA GGAAGGCAAA ATGCCGCAAA
6121 AAAGGGAATA AGGGCGACAC GGAAATGTTG AATACTCATA CTCTTCCTTT TTCAATATTA
6181 TTGAAGCATT TATCAGGGTT ATTGTCTCAT GAGCGGATAC ATATTTGAAT GTATTTAGAA
6241 AAATAAACAA ATAGGGGTTC CGCGCACATT TCCCCGAAAA GTGCCACCTG ACGTC
//
```


Figure 26T



% Increase of LSR Transcription in Hepa 1-6 cells Transfected with ZFP-NVF plasmids (Northern Analysis)
20.00%
15.00%
10.00%
5.00%
0.00%
5182
5183
5185
5186
5205
Control ZFP
48hrs post transfection

Figure 27

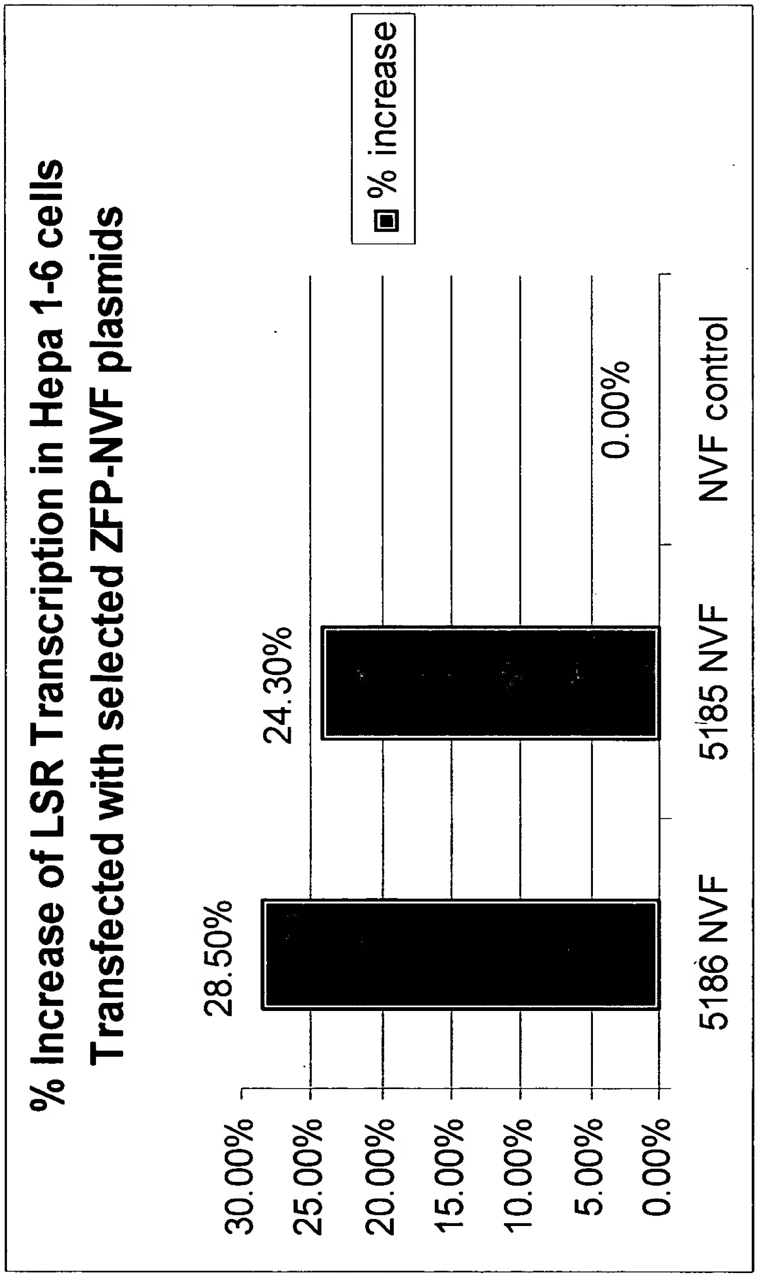

% Increase of LSR Transcription in Hepa 1-6 cells
Transfected with selected ZFP-NVF plasmids
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
28.50%
24.30%
0.00%
5186 NVF
5185 NVF
NVF control
% increase

Figure 28

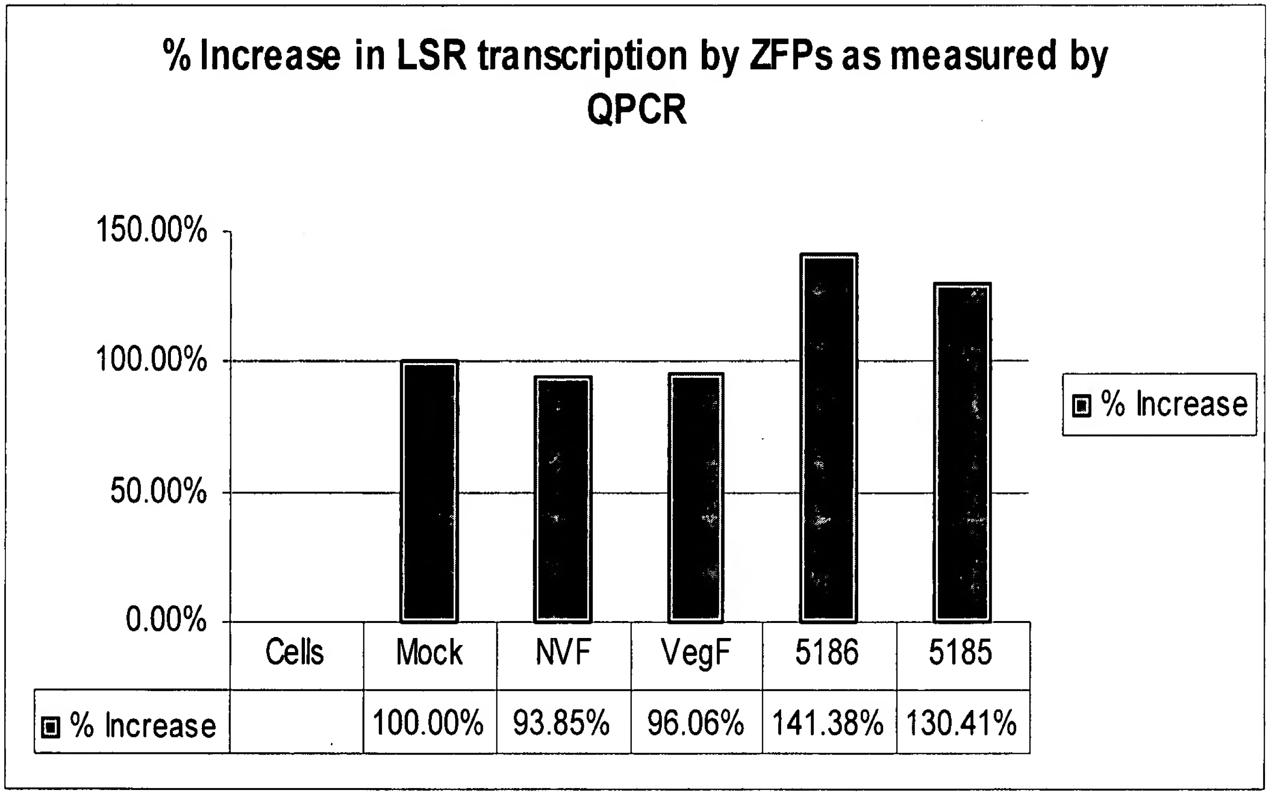

% Increase in LSR transcription by ZFPs as measured by QPCR
150.00%
100.00%
50.00%
0.00%
Cells
Mock
NVF
VegF
5186
5185
% Increase
100.00%
93.85%
96.06%
141.38%
130.41%
% Increase

Figure 29

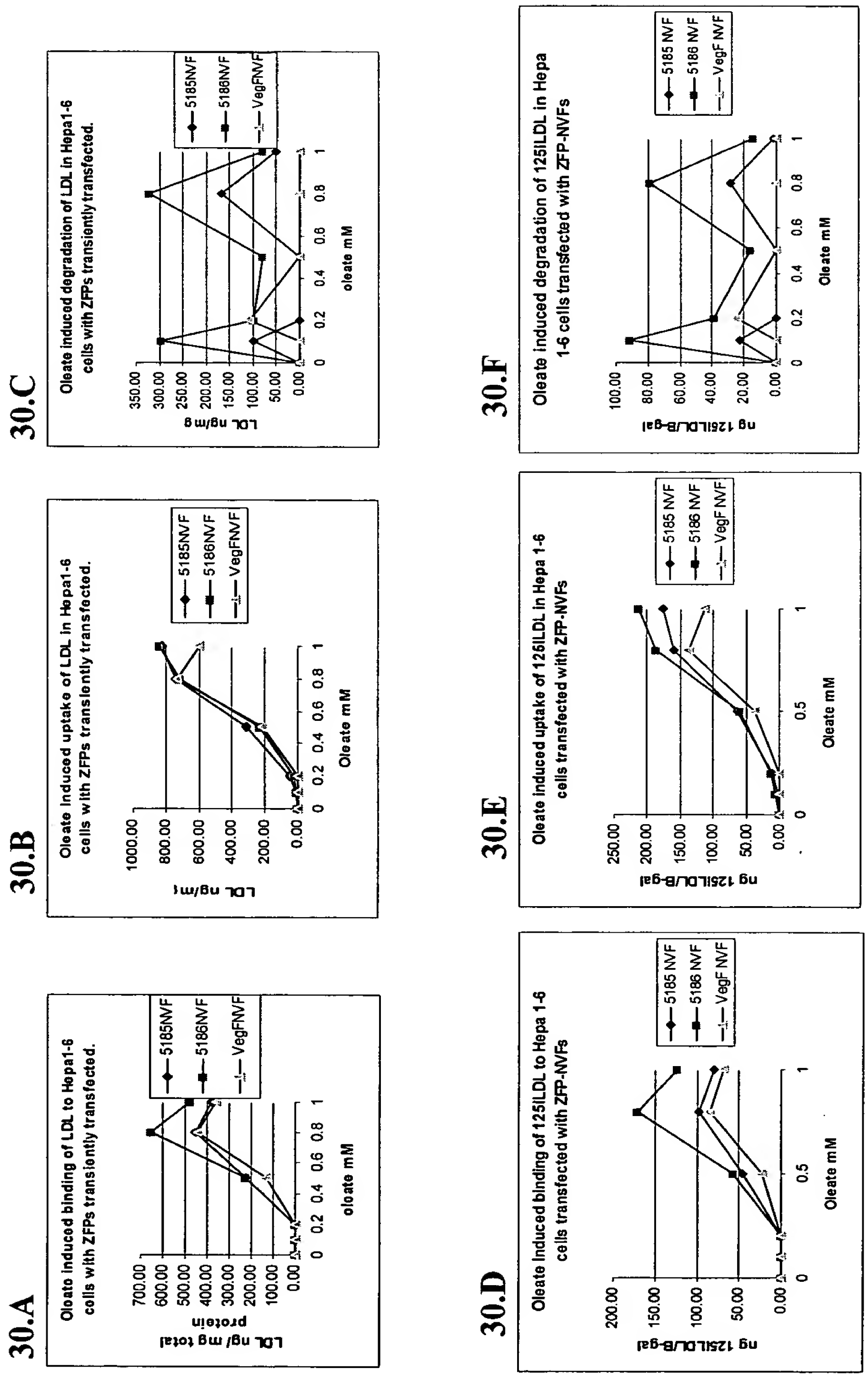

30.A
Oleate induced binding of LDL to Hepa1-6 cells with ZFPs transiently transfected.
LDL ng/ mg total protein
oleate mM
5185NVF
5186NVF
VegFNVF
30.B
Oleate induced uptake of LDL in Hepa1-6 cells with ZFPs transiently transfected.
LDL ng/mt
Oleate mM
5185NVF
5186NVF
VegFNVF
30.C
Oleate induced degradation of LDL in Hepa1-6 cells with ZFPs transiently transfected.
LDL ng/m g
oleate mM
5185NVF
5186NVF
VegFNVF
30.D
Oleate induced binding of 125ILDL to Hepa 1-6 cells transfected with ZFP-NVFs
ng 125ILDL/B-gal
Oleate mM
5185 NVF
5186 NVF
VegF NVF
30.E
Oleate induced uptake of 125ILDL in Hepa 1-6 cells transfected with ZFP-NVFs
ng 125ILDL/B-gal
Oleate mM
5185 NVF
5186 NVF
VegF NVF
30.F
Oleate induced degradation of 125ILDL in Hepa 1-6 cells transfected with ZFP-NVFs
ng 125ILDL/B-gal
Oleate mM
5185 NVF
5186 NVF
VegF NVF

Figure 30

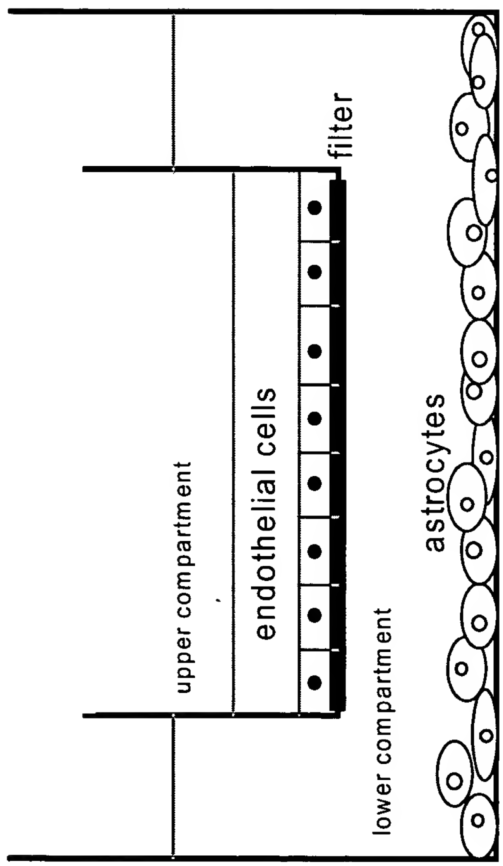

upper compartment
endothelial cells
filter
lower compartment
astrocytes

Figure 31

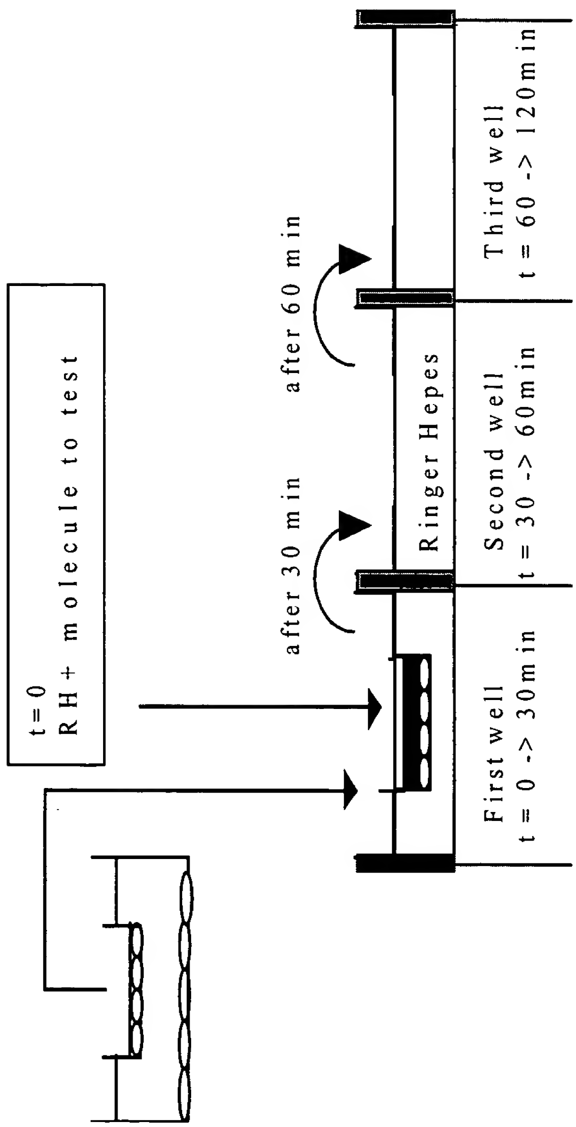

t = 0
RH + molecule to test
after 30 min
after 60 min
Ringer Hepes
First well
t = 0 -> 30 min
Second well
t = 30 -> 60 min
Third well
t = 60 -> 120 min

Figure 32

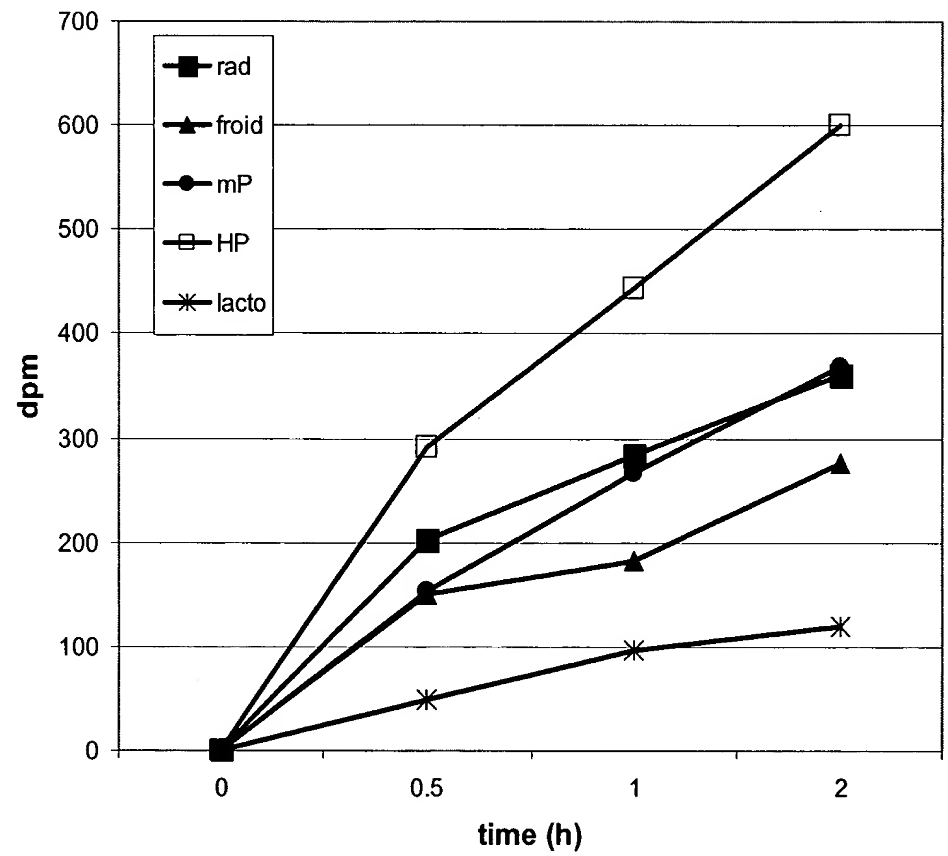
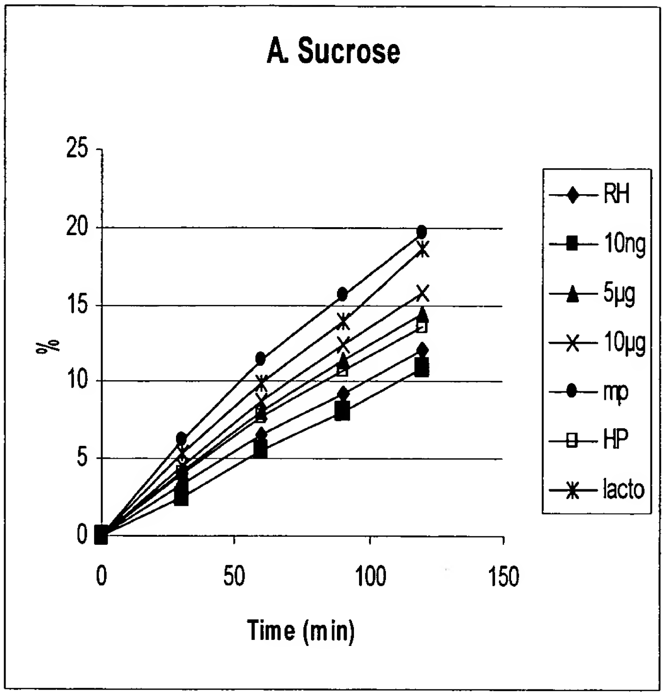

700
600
500
400
300
200
100
0
dpm
0
0.5
1
2
time (h)
rad
froid
mP
HP
lacto

Figure 33

34A



34B

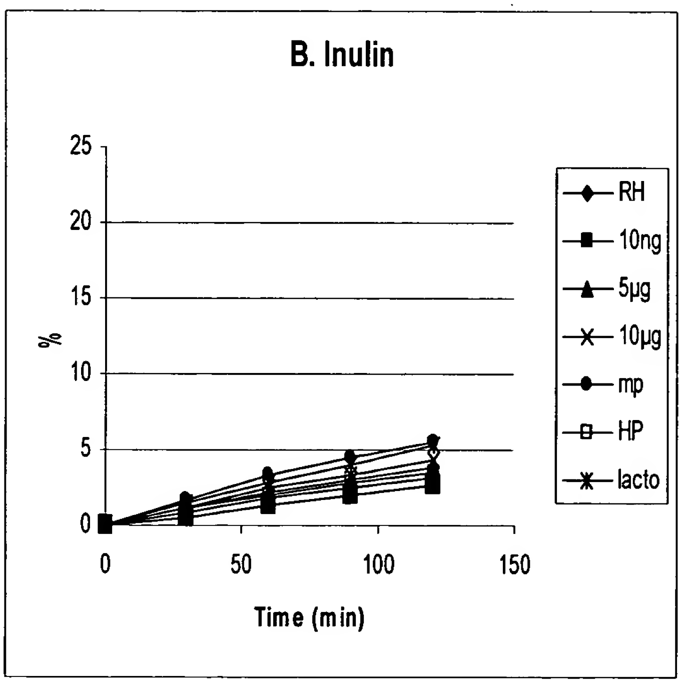


Figure 34

35A

35B

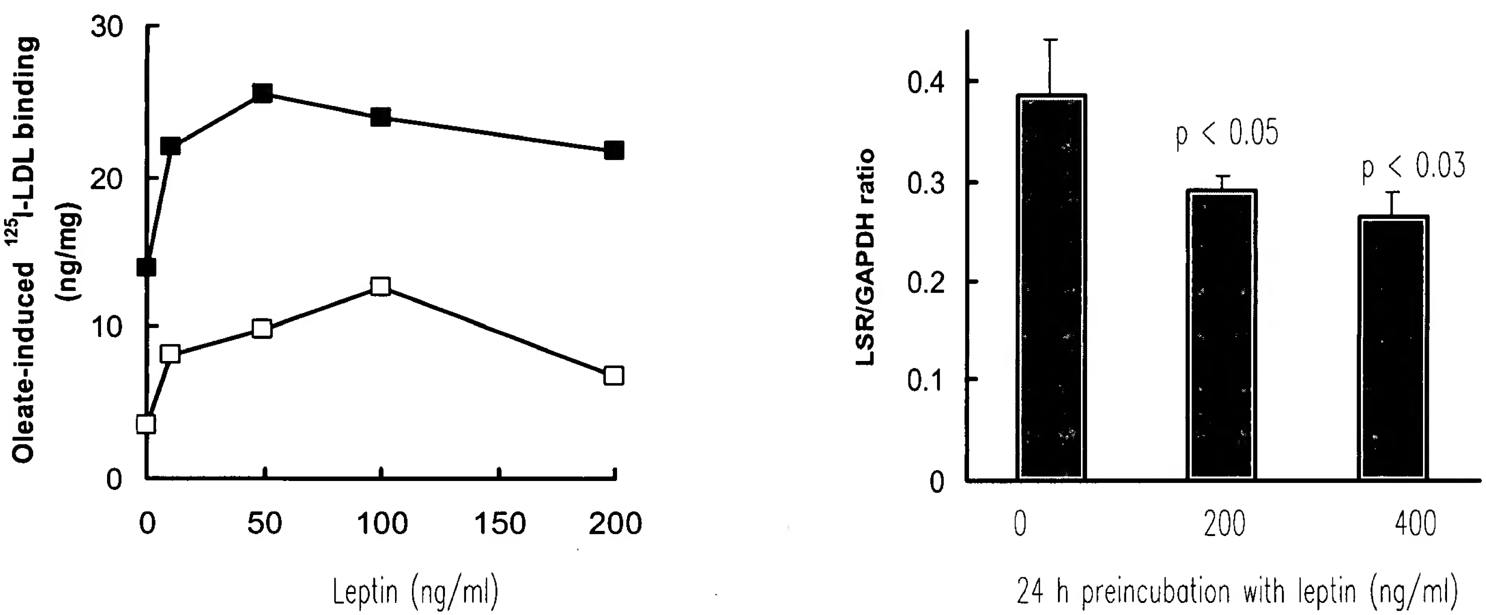


Figure 35